

STATE OF NEW YORK

SPECIAL REPORT

OF THE

STATE TAX COMMISSION

No. 10

THE ASSESSMENT OF REAL PROPERTY IN THE UNITED STATES

By

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•FOREWORD OF STATE TAX COMMISSION

* This is the tenth special report under the plan inaugurated in 1928 pursuant to the provision of the Tax Law of New York State requiring investigations to be made from time to time of the general system of state taxation. The author of this particular work is Joseph D. Silverherz. The State Tax Commission wishes to acknowledge its indebtedness to Columbia University and particularly to Professor Robert Murray Haig for selecting Mr. Silverherz to make this study on the assessment of real property in the United States.

MARK GRAVES,
President

JOHN MERRILL,
JOHN P. HENNESSEY,
Commissioners

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Deputy Commissioner, Bureau of Research

PREFACE

This monograph is divided into four parts. The first part attempts to provide a historical perspective. The second part is a compilation of the organization provided for assessment, review, equalization and supervision, and a survey of the findings of research investigators on assessment conditions throughout the United States. It is not intended to be comprehensive in the sense that every possible shred of evidence has been included, but it is believed to be reasonably complete. In the writer's opinion, this section is the most valuable portion of the work, since for the first time this formerly uncoordinated mass of data has been organized and analyzed. The third section is in the nature of a theoretical analysis, but every effort has been made to correlate theoretical considerations with actual experience. The result is the recommendation for state administration, and a program for New York is outlined in Part IV. It is realized that many lesser reforms will probably improve present assessment conditions, some of them rather substantially, but it is hoped that the reform which holds promise for the most equitable, economical and efficient administration of the real property tax should be given a fair chance.

The writer is very grateful to Professor Robert M. Haig for making this study a possibility, for guidance and inspiration, and for strict yet fair criticism. Professor Edwin R. A. Seligman has, since the writer's first acquaintance with his works in 1929, imbued him with a lively interest in fiscal theory. Professor Carl Shoup has made a number of helpful suggestions. Mr. Lawson Purdy, formerly President of the Department of Taxes and Assessments of New York City, and Mr. Philip H. Cornick of the Institute of Public Administration have given much mature, practical advice.

September, 1935.

J. D. S.

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PART I
HISTORICAL BACKGROUND

CHAPTER I

THE DEVELOPMENT OF PROPERTY TAX ADMINISTRATION IN THE UNITED STATES

Property Taxation in the Colonial and Early National Period

The system of property taxation existing in the colonial and early national periods was very crude. The most common practice was for the legislature to set "ratings" for various types of property at amounts representative of their estimated annual earnings. Thus, in Connecticut in 1676, lands were rated at from 55 s to 20 s per acre, depending on locality; house or home lots, at from 55 s. to 15 s. per acre, those of Hartford and Wethersfield being rated at the former sum; tilled lands, according to whether they were lowlands or uplands, at from 25 s to 8 s per acre; mowing and pasture lands, at from 20 s to 10 s per acre; and all other lands, at 1 s. per acre.¹

In New Hampshire, the classification of the legislature went along other lines. In 1772, lands were to be estimated as follows: orchards, one shilling per acre, accounting so much orchard as will one year with another produce ten barrels of cider, to be one acre; arable land, eight pence per acre, accounting so much land as will produce twenty-five bushels of grain, one year with another, to be one acre; mowing lands, eight pence per acre, accounting so much land as will produce one ton of hay, one year with another, to be one acre; pasture land, three pence per acre, accounting so much land as will summer a cow, one year with another, to be four acres.²

In the Middle Atlantic commonwealths property taxation was not so important as in New England. For example, during the regime of the Dutch, the principal taxes were customs and excises. Property taxes were levied only at the very end of the period, except in Long Island (which was largely settled by Englishmen, and only nominally under Dutch jurisdiction).³ A direct property tax of one penny in the pound was imposed in 1665 to meet the expenses of the newly established county courts. The assessment was made at certain fixed rates for each kind of property.⁴ The

¹ F. R. Jones, *History of Taxation in Connecticut, 1636-1776* Johns Hopkins Studies in Historical and Political Science, Fourteenth Series, VIII, 1896, pp. 16 et seq.

² M. H. Robinson, *A History of Taxation in New Hampshire*, Publications of the American Economic Association, Third Series, Vol. III, No. 3, Aug 1902, p. 23.

³ J. C. Schwab, *History of the New York Property Tax*, Publications of the American Economic Association, Vol. V, No. 5, 1890, pp. 7-35.

⁴ J. A. Fairlie, *The Centralization of Administration in New York State*, Columbia Studies in History, Economics and Public Law, Vol. 9, No. 3, 1898, p. 150.

first property tax imposed on the entire province was levied in 1683. Fixed ratings were adopted in this colony at various times, being repealed or falling into disuse after each time.⁵

Property taxes in the South were rare during the colonial period. When they came to be levied, in the early national period, the legislative schedule system was adopted. Thus, in Maryland, at the end of the eighteenth century, lands in each county had received valuations "at various rates, chiefly between thirty-three shillings and nine pence, and twenty-two shillings and three pence, but in one instance as low as four shillings by the acre."⁶

In Kentucky, at this time, lands were divided into three classes, the first class being taxed at 50 cents per 100 acres, the second class at 25 cents, and the third class at 12½ cents. Town lots were taxed *ad valorem* at 50 cents per \$333 33 value.⁷

So too, in South Carolina. Stated Wolcott in 1796: "All the lands in this state are divided into districts which are particularly described by law; within most of the districts, the lands are classed by general descriptions, indicative of their value, as resulting from natural fertility or situation; to each class a specific value is assigned, according to which all lands falling within a given class, are uniformly taxed: For instance, all tide swamps, not generally affected by the salts or freshes, of the first quality, are rated at six pounds per acre; of the second quality, at four pounds per acre; of the third quality, at two pounds per acre; all pine-barren land, adjoining such swamps, or contiguous thereto, with respect to the benefit of water carriage, at ten shillings per acre; all prime inland swamp, cultivated and uncultivated, at an average of three pounds per acre; second quality, at two pounds per acre; third quality, at one pound per acre; pine-barren land, adjoining or contiguous thereto, at five shillings per acre; salt marsh, or inland swamps, proved to be incapable of immediate cultivation, at five shillings per acre."⁸

In Georgia, in 1796, tide swamps of the first quality are rated at ten dollars and thirty-nine cents per acre, pine-barren lands at twenty-one cents per acre. Lands of intermediate qualities were

⁵ Schwab, *op. cit.*, pp. 55, 56, 60. The cessation of assemblies in New York after 1684 prevented the development at this time of any regular system of direct taxation, and for the next seven years the provincial revenue was derived as before from customs and excises. When money was needed for the war with the Indians, as a part of the conflict between William III and Louis XVI, a direct provincial tax was again levied. Commencing with 1690, provincial property taxes were levied continuously until about the end of the century. After the conclusion of the peace at this time, they were again dropped (with occasional exceptions) until 1744 (when the struggle became active again). Fairlie, *op. cit.*, pp. 152-153.

⁶ Oliver Wolcott, Jr., *Report on Direct Taxes*, Communicated to the House of Representatives Dec. 14, 1796, in *American Finance Papers*, Vol. 1, p. 430.

⁷ *Ibid.*, p. 433.

⁸ *Ibid.*, pp. 434-435.

rated at various rates according to their advantages either of soil or situation.⁹

Establishment of State Equalization

When lands constituted the bulk of property, when wide and numerous differentials in land values had not yet appeared, when land transfers and sales were relatively infrequent, the method of legislative schedules of estimated earning ratings, which may be considered as "pre-assessment equalization" was a fairly appropriate adjustment.¹⁰ When the underlying economic conditions changed, when buildings came to be constructed, when towns and cities grew up and complex location values arose, this method of property taxation and equalization ceased to bear any resemblance to an appropriate adjustment. Hence, *ad valorem* taxation superseded specific taxation, and the need for equalization, formerly met by the legislative schedule, came to be met by equalization of the post-assessment type. These changes occurred in Massachusetts as early as the end of the seventeenth century.¹¹ A system of commonwealth equalization was in operation in Rhode Island as early as 1795.¹² Connecticut and Vermont made the change in 1819.¹³ The same transition took place in the older states of the Midwest. *e.g.*, Ohio in 1825, and Indiana in 1836-1841.¹⁴

⁹ *Ibid.*, pp. 435-436

¹⁰ Cf. Edwin R. A. Seligman, *The Income Tax*, 2d ed., 1914, pp. 382-383.

¹¹ Lutz, *loc cit.*, p. 19. R. H. Whitten, *Public Administration in Massachusetts*, Columbia Studies in History, Economics and Public Law, Vol. VIII, No. 4, 1898, p. 102

¹² Wolcott, *loc cit.*, p. 422.

¹³ *Report of the Special Commission of Connecticut on the Subject of Taxation, 1887*, pp. 9-10, F. A. Wood, *The Finances of Vermont*, Columbia Studies in History, Economics and Public Law, Vol. LII, No. 3, 1913, pp. 33-34

¹⁴ E. L. Bogart, *Financial History of Ohio*, University of Illinois Bulletin Vol. IX, No. 21, 1912, pp. 181-202. In *The State Tax Commission*, Prof. H. J. Lutz described the establishment of state equalization as a product of forces and factors existing in the Midwest around the middle of the nineteenth century. In the writer's view, state equalization of the post-assessment type was a result of the breakdown of the legislative rating system and was established in New England prior to its emergence in the Midwest. Prof. Lutz was aware of the early establishment of state equalization in New England, but chose to minimize its importance, and to differentiate it from the later midwestern equalization on the grounds that the former was neither annual nor regular. In the writer's view, there is little basis for differentiation on the ground of regularity. It was established both in New England and in the Midwest as a regular function of government. As for the question of time, it is true that the interval of ten years which was common in New England was rather long. So, however, was the five year interval of Michigan and the irregular five, two, six and four year intervals of Indiana, which are two of the state equalizations regarded by Prof. Lutz as genuine cases. Moreover, the question of time interval is really not relevant. Most probably, the principal reason why the equalization period was longer in New England was because that section was older, values less unstable, and the need for frequent changes less than in the young, fast-growing, newer states of the West. Perhaps the nature of the issue is best indicated by the experience of Massachusetts. After the readjustment of wealth and population and the acceleration of industrialization caused by the Civil War, the former time interval of ten years was shortened to five years until 1883, and to three years from this date thereafter. For the discussion by Lutz, see *The State Tax Commission*, Harvard Economic Studies, Vol. XVII, 1918, pp. 23-24.

Development of State Equalization

At first, equalization was usually performed either by legislative committee or sectional representatives appointed by the legislature.¹⁵ Since the pre-assessment equalization had been made by the legislature, it was only natural that the new post-assessment equalization be considered a legislative function. But this type of equalization soon proved unsatisfactory. The representatives attempted to "look after" the interests of their constituents; and moreover it came to be realized that the task, if it was to be handled efficiently, was really administrative rather than legislative in character. Hence, the newer midwestern boards of equalization came to be composed of high state administrative officers, more competent to deal with the task and less sectional in viewpoint. There were various shifts back and forth from the sectional representative type of equalization board to the *ex officio* administrative type, but the former was eventually superseded by the latter during the nineteenth century.¹⁶

Another aspect of the development of state equalization was the shortening of the time interval between equalizations. In the rapidly changing Middle West, a shorter interval was a better adjustment to underlying economic conditions, and, for this reason, equalizations were made more frequently in this section of the country. After the Civil War, when the economic development of the entire country was sharply accelerated, short intervals became common in the older New England States also.

Further Improvements in State Equalization and Origins of Modern State Supervision

The adaptations and improvements made in state equalization which have been described above failed to meet the need for equi-

¹⁵ This was the common type in New England and the older states carved out of the Northwest Territory.

¹⁶ In Wisconsin, equalization was transferred from the original *ex officio* administrative board to the Senate (actually to a committee of the Senate) in 1858, and back again to an *ex officio* board in 1878. Again, the early Illinois boards were of a sectional representative type, one elected first from each Senatorial district, later from the Congressional district (except for the first appointments under the original act of 1807, which were made by the Governor). In Connecticut, one commissioner from each Senatorial district had been added to the board in 1866, but this was repealed in 1871. The South Carolina board of 1868 was composed of representatives elected by the county commissioners.

However, the *ex officio* administrative board, established in Connecticut in 1819, in Iowa and Michigan in 1851, and in Wisconsin in 1852, came to be the prevailing type, as the following list of states (with the year in which this type of state board of equalization was established) illustrates: Minnesota (1860); Kansas (1861); Nebraska (1869); Wyoming (1869); California (1870); Missouri (1872); Colorado (1876); New Mexico (1882); Idaho (1887); Arizona (1887); North Dakota (1890); South Dakota (1891); Montana (1891); Nevada (1891); Washington (1891); Oregon (1891); Utah (1896). Data from Lutz, *op. cit.*, pp. 45-46.

table taxation. The *ex officio* board, although an improvement over the legislative or representative type was still inadequate to the task. It was still of a political nature, although less sectional than the other types. Moreover, the officials were heavily burdened with other work and other responsibilities and could devote only a small portion of their time to the task. Good equalization required investigation of conditions by impartial, full time tax officials, not hasty action by general state officers.

New York was probably the first state to attempt to meet the need for technical state equalization. In 1859, it established a State Board of Assessors, composed of three full-time appointive members. Their chief duty was to make regular visits to the counties of the State and prepare a written digest of facts pertinent to the making of a State equalization. They were also to sit with seven State officers (the Lieutenant-Governor, the Speaker of the Assembly, the Secretary of State, the Comptroller, the Treasurer, the Attorney-General, and the Surveyor) as the State Board of Equalization. This Board of Assessors went about its duties very earnestly at first. By 1863 it had classified all of the lands of the State, and had compiled a mass of data of crop values, farm values and similar statistics. The Civil War then took up the attention of the people, and progress in equalization was probably checked. At any rate, no reports were published in the period 1863-1873. When reports were again published, it was seen that an entirely new group was in charge, utilizing not the land classification method of equalization, but the sales ratio method. For a while there was a good deal of activity, including a long conflict between the State board and the New York City assessors. In the late eighties, the interest of the Board of Assessors in equalization declined and the performance of the function deteriorated into a routine.¹⁷

California furnishes another example of an early attempt at technical state equalization. Its experience was a story largely of judicial opposition and consequent demoralization. In 1870, because of exceedingly inequitable assessment conditions, an unusual state board of equalization was established, composed of the State Comptroller and two full-time members, appointed by the Governor for a term of four years. The board was given investigational powers at this time. Two years later, it was permitted to prescribe rules and regulations to govern assessors and county boards. In 1873, however, its chief function, the power to equalize, was held to be unconstitutional.¹⁸ It continued in existence largely as a statistical bureau until 1879, when a new constitution was adopted. In the new constitution provision was made for a state board of equalization with power to equalize. It was to be composed of

¹⁷ Lutz, *op cit*, pp. 57-60

¹⁸ *Houghton et al. v. Austin*, 47 Calif 646. The act of equalizing was considered by the court to be tantamount to assessing. Since the constitution required that property be assessed by an officer elected by those whose property he was assessing, equalization by the board was therefore held unconstitutional.

elective officials, one from each Congressional district, and the comptroller. The new body again began a vigorous attempt to better conditions, but again met with judicial opposition. This time it was held that the board did not have the power to deal with individual properties. This decision emasculated its powers, and eventually the board lapsed into a routine performance of the powers and duties that it did possess.¹⁹

The record of New York with a Board of Equalization which was partly composed of appointive full-time experts was not so outstandingly good that it should attract immediate interest and inspire imitation by other states. The California experience with investigation and supervision by a partly appointive board was so demoralizingly blocked by hostile court action that it could not be expected to attract followers. But the problem of tax administration, especially after the Civil War, with its impetus to industrialization, was becoming more and more acute, for *ex officio* administration had become a serious maladjustment to the needs of the time. The adequate taxation of public service corporations required more than the superficial attention which state financial officers or *ex officio* boards of corporate assessment could give them. Meanwhile, the growth of stocks and bonds, a concomitant of the development of railroad transportation and industrialization, made the local assessor more unable than even before to administer the general property tax for the states.

In 1891, Indiana established, as a result of extreme financial difficulties (which was probably the marginal consideration added to the growing acuteness of the escape of intangibles and inadequacy of the taxation of railroads and other public service corporations found in many of the other states), a State Board of Tax Commissioners. This board was to be composed partly of appointive tax experts, and was to have two main duties: (a) the development of adequate fair taxation of the railroads and other public service corporations; (b) the improvement of the general property tax by vigorous supervision of the local assessors.

Development of Technical State Tax Administration and Supervision

The precedent set by Indiana in 1891 made a strong appeal to the legislators of other states. Here at last was a promising solution to the maladjustment between fiscal and economic systems, which, by this time, had become so extremely acute. The result was that the end of the nineteenth century and the first two decades of the twentieth saw a reform wave in tax administration sweep the country, the tax commission-supervision movement. Technically specialized, non-political officials gradually replaced elective general and financial officers at the head of state tax systems; technical systems of public utility taxation were developed; and supervision

¹⁹ Lutz, *op. cit.*, pp. 84-92.

extended to include mandatory powers such as reassessment and removal (of local assessors for failure properly to perform their duties). Equalization was not abandoned; indeed it was further developed and became less political under technical administration; but it was made subordinate to supervision, education and assistance as the chief means of improving the levy of the state property tax.

Progress toward technical appointive tax administration was very gradual at first, *ex officio* administration being continued on a partial scale. The Board of Tax Commissioners of Indiana of 1891 was composed not only of two skilled and competent persons appointed by the Governor, but also of the Secretary of State, the Auditor of State and the Governor himself.²⁰ The Board of Tax Commissioners of Michigan of 1899 was granted supervisory powers, but equalization remained in the hands of the *ex officio* board until 1911.²¹ In Wisconsin, the first Tax Commission, that of 1899, was limited in life to only ten years, but it was reorganized and made permanent in 1905.²² After the movement had gotten well under way, however, wholly appointive, technical tax administration was usually established.²³

With respect to supervision, it was rapidly adopted after the Indiana precedent and extended in scope to include mandatory powers. Some of the states, such as Kansas, Nebraska and Wisconsin (until 1911) followed the precedent established by Indiana in 1891 of an intermediary elective county supervisory official. Others, such as Massachusetts, New York and Wisconsin, adopted the method of district supervisors appointed directly by the Tax Commission or Commissioner. Some states, such as Michigan and North Carolina undertook extensive state-wide reassessment programs.

Recent Tendencies

The movement toward specialized technical, non-partisan tax administration has continued.²⁴ However, new factors and forces have checked the movement toward the development of supervision. We have noted that interrelated with the improvement in the administration of the state general property tax was the development of technical state administration of taxes on public utilities and other corporations. As the country became further industrialized and as a science of public finance developed with principles of

²⁰ Lutz, *op. cit.*, p. 152.

²¹ *Ibid.*, pp. 200-204.

²² *Ibid.*, pp. 240-241.

²³ See Lutz, *The State Tax Commission*, pp. 132-133, for table showing the composition and date of creation of state tax commissions or departments up to 1917.

²⁴ The latest types of specialization in state tax administration have been the establishment of separate departments or bureaus for different taxes, and the separation of administrative functions from quasi-judicial functions by the establishment of appellate tax boards. The former is not uncommon now. Examples of the latter are the State Boards of Tax Appeals of Massachusetts and New Jersey, established in 1930 and 1931, respectively.

equitable distribution of taxation, new and more specialized taxes were proposed and established in the states. Fundamentally, the breakdown of the general property tax system was caused not only by the administrative defects which the state tax commission-supervision movement attempted to remedy, but also by the more basic maladjustment of this system to an advanced, industrialized economic organization. Even administratively, the attempted reform, that of technical state supervision, failed to bring about equitable results, especially in the conspicuous failure of the local officials to place intangible personalty on the rolls. This was combined with the serious shortcomings of property as the norm of taxpaying ability in an advanced economy, and the general result of this maladjustment of fiscal system to economic organization was the breakdown of the general property tax system in those states where a substantial degree of industrialization had taken place. In addition to the public utility and other corporation taxes which have been mentioned, and state inheritance taxes (which were probably a result of a combination of this breakdown of the general property tax system, the need for revenue to meet the growing expenses of state governments, the teachings of the science of public finance, which was then only beginning in the United States, and an electorate growing antagonistic to concentration of wealth), other state taxes were established and developed. All of these newer state taxes, those mentioned and the still newer income, business, gasoline, and sales taxes, constitute a more suitable adjustment to the more advanced economic organization of the country than the general property tax system. But the effect of these recent developments on state supervision over local assessments has been adverse. Property tax administration has become a less important factor in the specific fiscal economy of the state governments, and at the same time, state supervision has been crowded out by the necessity for administering these newer taxes.²⁵ This trend toward the decline of state supervision and control over property tax administration is somewhat obscured by the tail-end of the tax commission-supervision movement in some states, especially the newer western states, and by the maintenance and even further development of an energetic policy of state supervision and control in a few midwestern states where a substantial direct state interest in property taxation is coupled with a progressive, efficient and alert tax commission, as is eminently the case in Wisconsin. But the trend toward decline in state supervision is unmistakable in most of the older states, and the reports of the tax commissions furnish abundant evidence that only rarely has the state tax commission continued to pursue a vigorous policy of state supervision and control for many years after the inauguration of such a policy.

²⁵ In 1902, the general property tax provided 52 per cent of state tax revenue in the United States. In 1925, it provided 28 per cent; in 1928, 25 per cent; in 1929, 22 per cent. Data from R. G. Hutchinson, *State Administered Locally Shared Taxes*, Columbia Studies in History, Economics and Public Law, No. 355, 1931, pp. 13-14; and National Industrial Conference Board, *Cost of Government in the United States 1929-1930*, 1932, p. 91.

Thus, the effect of the development of a wide variety of special state taxes, which is a suitable adjustment to modern economic and social conditions, has been adverse with respect to state participation in real property tax administration. The nature and extent of state supervision and control of assessments vary as among the various states. So, too, does the administrative competency of local assessing officials. On the average, however, the state, which has kept up with the technological advance of the country, does not participate very energetically in the matter of real estate assessment. On the other hand the localities, to which the task of assessment has been entrusted, are, with the exception of the larger cities, lagging far behind in the matter of modern, technical, efficient administration. The result is that the tax administration of the most important source of local revenue, and a substantial source of state revenue in many states, is not adapted to its task under modern conditions.²⁶ With the general property tax yielding about five billions of dollars annually, and the real property tax constituting about four-fifths of this, no less than the efficient and equitable administration of what is still the most important tax source in our entire national, state and local fiscal system is at stake.²⁷

²⁶ In 1928, the general property tax supplied 93 per cent of the total tax revenue of local units of government in the United States; in 1930, 92 per cent. In 1928, it yielded 25 per cent of total tax revenue of the states, and with special property taxes, 78.08 per cent of all state and local tax revenues, in 1929, these figures were 22 per cent and 76.29 per cent respectively. National Industrial Conference Board, *Cost of Government in the United States 1929-1930, 1932*, pp. 95 and 97.

²⁷ In 1928, the general property tax yielded \$4,314,193,000 to local units of government, \$381,170,949 to state governments, in 1929, these figures were \$4,446,940,000 and \$350,233,237. In 1930, the local units alone received \$4,614,153,000. National Industrial Conference Board, *Cost of Government in the United States 1929-1930, 1932*, pp. 106, 110, 114.

In 1928, for the states in general, the real property tax constituted 77 per cent of the general tax base; in cities over 30,000, 83 per cent. President's Conference on Home Building and Home Ownership, *Reports of the Committees on Home Finance and Taxation*, 1932, Appendix I, pp. 148-149.

The most important other taxes fiscally are the federal corporate income and personal income taxes. For example, in 1928, the former yielded \$1,291,846,000, the latter \$882,728,000; in 1929, the figures were \$1,235,733,000 and \$1,095,541,000 respectively. National Industrial Conference Board, *Cost of Government in the United States 1929-1930, 1932*, p. 102.

PART II
PRESENT ASSESSMENT ORGANIZATION AND
ASSESSMENT CONDITIONS

CHAPTER II

METHODOLOGICAL INTRODUCTION

General Purpose and Content of Part II

The purpose of this section of the report is to present a survey of assessment administration and assessment conditions in the United States. For this purpose, an attempt has been made to procure as complete and reliable information as possible for each state on the following points: (1) a description of the organization provided for assessment, review, and equalization; (2) a description of the statutory powers and duties of bodies with respect to state supervision and control; (3) a summary of the actual character and extent of such supervision and control; (4) a description of recent assessment conditions. The final chapter of Part II is devoted to summarization, analysis and interpretation.

Character of the Source Materials

HOMOGENEITY.—The quality and quantity of the available information for the different states varies, and it is not in entirely comparable form. However, the writer has made every effort to fuse the whole into a homogeneous body of fact.

ORGANIZATION FOR ASSESSMENT, REVIEW AND EQUALIZATION.—With respect to the first subdivision, namely, the organization provided for assessment, review and equalization, the data of various compilations was utilized, with inconsistencies checked by reference to the statutes. Especially helpful were those prepared by Dr. Ralph T. Compton for the National Industrial Conference Board, by Prof. Jens P. Jensen for the Tax Research Foundation, and by Dr. R. W. Newton and W. O. Hedrick of Michigan State College.¹ In addition to these summary sources, a good deal of descriptive material was extracted from tax studies of individual states; and in many cases, the statutes themselves were consulted, especially for recent changes.

STATE SUPERVISION: STATUTORY POWERS.—With reference to the second subdivision, namely, the statutory powers of state tax officials with respect to supervision, the material in these compilations was

¹ National Industrial Conference Board, *State and Local Taxation of Property*, 1930, Tables and Maps, pp. 95-245; Tax Research Foundation (M. S. Howard, Editor), *Tax Systems of the World*, Fifth Edition, 1934, p. 85; R. W. Newton and W. O. Hedrick, *Farm Real Estate Assessment Practices in Michigan*, Appendix, Michigan Agricultural Experiment Station Special Bulletin 172, Feb., 1928. The relevant sections in the *Digest of State Laws Relating to Taxation and Revenue* published by the Bureau of the Census of the United States Department of Commerce in 1924 (prepared with the advisory assistance of Prof. Carl C. Plehn), were also useful.

not sufficiently extensive and detailed for the purpose of this study. Additional information was contained in a digest prepared by Annie Neal of the Wisconsin Legislative Reference Library in 1924 and by a chapter in Dr Schuyler Wallace's *State Supervision over Cities in the United States* (1928). The former was made ten years ago and changes have occurred since this time; the latter is not sufficiently detailed for an intensive survey of each state. It was therefore decided to make a complete and up-to-date survey of the statutes themselves for this subdivision.

STATE SUPERVISION: ACTUAL.—As for the third subdivision, the conclusions which have been reached on the character and extent of actual state supervision and control have been made on the basis of (a) the reports of the administrative tax agencies of the various states in recent years, and (b) personal correspondence with them. Usually the material contained in the official reports is adequately indicative of the supervisory activities of the state administrative agency; however, for some of the less frequently involved powers, such as reassessment and removal, information had to be sought by correspondence.²

RECENT ASSESSMENT CONDITIONS—With respect to the final subdivision, the source materials on recent assessment conditions, the greatest variation in the quality and quantity of the data was encountered. In some of the states, elaborate, technical investigations have been made; in others there is little more than a brief comment by a state tax commission or similar body. There is a paucity of available information on assessment conditions in that group of sparsely settled states east of the Pacific Coast known as the Mountain States. Throughout the country a greater number of technical tests have been made of rural assessment as compared with urban. On the whole, however, enough material is available so that conclusions may be validly drawn for the entire country.

The most prolific source of evidence on assessment conditions consists in a group of studies made by economists and research investigators connected with the various state agricultural colleges.³ A second abundant source of materials on the present status of assessments are the reports of recent official special investigating

² The *State Tax Commission* of Prof. Lutz was found to be a valuable guide, despite the fact that it is now some sixteen years old. Prof. Schuyler Wallace's chapter on Finance and Taxation in *State Supervision over Cities in the United States* was helpful, as was also the material on the subject in the *Tenth Annual Report of the Illinois Tax Commission*, 1928. In some cases, the studies of taxation and assessments in individual states contained information on this point.

³ This body of fiscal literature is of rather recent origin. Many of these studies are of considerable technical excellence and deserve a more prominent place on the book shelves of fiscal scientists than they have often received. Since 1925, when funds were provided by the Purnell Act, tax research by state agricultural colleges with the support of the federal government has been extensive. For more detail, see M. M. Daugherty, "Review of Current Farm Taxation Research," in *Farm Economics*, July, 1933.

commissions.⁴ A third source is that of investigations carried on by various quasi-public organizations such as Chambers of Commerce; University Bureaus of Business, Economic, or Government Research; and organizations which provide technical investigational and advisory service to governments.⁵ Finally, observations and conclusions of the permanent administrative tax commissions or departments have been utilized.⁶

The Two Basic Methods of Investigation of Assessments: Their Relative Merit

THE TWO TYPES OF INVESTIGATION.—There are two principal types of investigation of assessments: In the one, a survey of actual assessment *practices* is made; in the other, the *results* of the system are tested by comparing assessed valuations with market or "true" value. The first method is usually conducted by means of personal visits to the local officials, although in some cases a questionnaire has been used. In the second type of investigation, actual sales data are most commonly utilized as the basis for the comparison; owners' estimates of value, and expert appraisals are sometimes used however.

RELATIVE MERIT OF THE TWO METHODS.—Of the two basic methods, the second is the preferable. It is true that the field survey method is not so dependent upon the current economic situation. For example, it can be used in times of depression, when a ratio study might not fairly test the equity of an assessment system. However, if there is selected for the test a more normal year, when buyers and sellers are not acting under extreme depression or boom psychology, and which is still recent enough so that modifications of the system have not been made, the ratio test method can avoid this limitation. Aside from this one advantage, the field survey

⁴ These reports are so well-known amongst students of public finance as hardly to require comment. Fundamentally, they are an adjustment to the growing complexity of our economic and fiscal organization and the consequent need of governments for specialized technical preparation of fiscal measures. They began to become important after the Civil War. For further detail, see Edwin R. A. Seligman, "American Reports on Taxation," constituting Ch. XIX of the *Essays on Taxation*, 10th Edition, 1928. Also J. W. Chapman, Jr., *State Tax Commissions in the United States*, Johns Hopkins University Studies in Historical and Political Science, Fifteenth Series, X-XI, 1897.

⁵ This is another aspect of the general movement for technical objective study of taxation commented on above.

⁶ When the tax commissions were first established, they often were both of an investigational as well as of an administrative character. Examples are the Indiana Board of Tax Commissioners of 1891, and the Wisconsin Tax Commission of 1899. There has been, however, a definite trend toward further specialization of labor in the separation of these two types of activity, and fundamental and far-reaching revision of the tax laws is usually delegated to special advisory commissions. However, on matters of an administrative nature, including assessment conditions, the permanent administrative tax commissions often make observations and recommendations, and sometimes special studies.

method is inferior as a method of investigating assessments. It unduly emphasizes the structural and external. For example, the existence of technical methods of assessing is not conclusive proof of the non-existence of inequality. To cite one possibility, political favoritism may reach considerably high proportions even in communities where objective technical methods apparently are utilized. On the other hand, a direct test of inequality is made by the ratio study method; and the net effect of all conditioning factors is revealed, leaving no need for conjecture. Moreover, the field survey method takes into account such factors as the varying difficulty of the task qualitatively and crudely, whereas the ratio test method is quantitative and precise in such respects. Again, the extent of information on assessments which can be acquired is far greater in the case of the ratio test study. It is true that the field survey method is reliably indicative in general; that if the assessment roll has been copied without changes or with very minor changes over a long period of time regardless of changes in values, there is practically no question but that assessments are inequitable; that if maps, records and technical methods are found to be lacking, it is very probable that assessments are not being made fairly and uniformly; and that where such technical methods are being used, the task is being fairly well-administered. But possibilities for further conclusions are very limited. On the other hand, the use of the ratio test method not only gives a more direct and precise set of observations, but it also allows the investigator an opportunity to seek and obtain answers to more than just the general question "Is the assessment good, bad or indifferent?" which the field survey method seeks to answer. For example, one may inquire into the extent of individual inequality, inter-district inequality, inter-value-class inequality, and other types of inequality, and receive definite, precise answers. Finally, because of its quantitative precision and directness, comparisons as amongst different states are much more easily made by the second method. Indeed, it is possible to reduce the description of assessment inequality to a single figure, called the "coefficient of dispersion." This figure, representing the average degree of individual assessment inequality, may be considered as a grade of the equality of assessments; an inverted grade, however, for the lower the figure, the better the assessments.

Terminology and Methodology of Ratio Test Studies

TERMINOLOGY.—The coefficient of dispersion is an average deviation divided by an average assessment ratio. Since a clear understanding of these terms is absolutely essential to an understanding of this section of the report, it is well to explain their meaning more fully at this point.

"Assessment Ratio."—*"Average Assessment Ratio."*—An "assessment ratio" is a percentage figure which represents the relationship between the value of a property and its assessed valuation.

Thus if a property is worth \$10,000 and is assessed at \$7,000, its assessment ratio is 70 per cent. The "average assessment ratio" is an average of the assessment ratios of a number of properties. Thus if we had four properties A, B, C and D assessed at ratios of 80, 75, 75 and 50 per cent respectively, the average ratio for the four properties would be $(80+75+75+50) \div 4$, or 70 per cent.

"Average Deviation."—The term "average deviation" is almost self-explanatory. It is an average of the deviations from the average assessment ratio. It measures the average degree of inequality from the average assessment ratio. In the case cited above it is 10 per cent: $(80-70) + (75-70) + (75-70) + (70-50) \div 4$, or $(10+5+5+20) \div 4$.

"Coefficient of Dispersion."—The average deviation, to repeat, is measured from the average assessment ratio. In order to compare the average deviation of one set of assessments with another, it is necessary to divide each of them by their respective average assessment ratios. This conversion to a 100 per cent assessment ratio basis is necessary in order to be able to judge the fairness of an assessment because the grading of any assessment depends not only on the average deviation, but also on the average assessment ratio. For example, a 10 per cent average deviation from an average ratio of 100 per cent would be a good assessment; while an average deviation of 10 per cent from a 20 per cent average ratio would be a very poor assessment. For every dollar of inequality would be multiplied by a tax rate five times higher in the second case than in the first. The measure which takes both average assessment ratio and average deviation from this ratio into account is termed the "coefficient of dispersion." In the case we have been considering it is approximately 14 per cent $(10 \div 70)$.⁷

METHODOLOGY.—The Problem of Weighting. Thus far we have neglected the problem of weighting. Let us place the facts of our assumed illustration in tabular form as follows:

Property	True value	Assessed value	Assessment ratio
A	\$10,000	\$8,000	80
B	20,000	15,000	75
C	40,000	30,000	75
D	100,000	50,000	50

⁷ Incidentally, it should be mentioned that the standard deviation (σ), which differs from the average deviation in that the individual deviations are squared and the aggregate later unsquared, was computed in a few of the studies. As a matter of fact, this is a better average because the above process maximizes the importance of the more frequently occurring ratios and minimizes the importance of the extremes. However, the average deviation is more readily understood, more easily calculated, and has been widely adopted in the investigations. Therefore, in the few cases where the standard deviation has been computed, it has been converted by the writer into the average deviation for comparative purposes. In a bell-shaped distribution (normal curve of error), the average deviation is 80 per cent of the standard deviation. While the typical assessment distribution is not perfectly bell-shaped, this relationship is still roughly correct.

The unweighted average assessment ratio is calculated by totaling the individual assessment ratios and dividing by their number ($280 \div 4$). The average assessment ratio weighted by the value of the properties is obtainable by two methods: (a) by summing the total assessed valuation of the four properties, summing the total market value of the four properties, and computing the ratio between the two summations ($\$103,000 \div \$170,000$); (b) by multiplying each ratio by weights based on the relative values of the properties before averaging them $[(80 \times 1) + (75 \times 2) + (75 \times 4) + (50 \times 10)] \div 17$.

With respect to the computation of the average deviation, the weighting would be achieved by multiplying each deviation from the average ratio by a value weight based on the relative value of each property before averaging them:

Property	Assessment ratio	Deviation from average assessment ratio (D)	Weight (W)	Product D x W
A	80	20	1	20
B	75	15	2	30
C	75	15	4	60
D	50	10	10	100
			<hr/> 17 <hr/>	<hr/> 210 <hr/>

The average ratio weighted by value is approximately 60 per cent; the average deviation weighted by value, approximately 12 per cent. The unweighted average ratio is 70 per cent; the unweighted average deviation 10 per cent. The coefficients of dispersion are approximately 20 per cent, weighted, and approximately 14 per cent, unweighted. Obviously, weighting by value may give a very different picture of the situation. Hence it is important that one method should be used consistently in a comparative study of the type made in this report in order to avoid comparing non-comparables. Since the unweighted coefficient has been most commonly used in the various ratio test studies, this coefficient has been selected whenever there has been a choice, and unless otherwise specified, is the index referred to as the "coefficient of dispersion" throughout this report.

It is an interesting question, however, whether it is theoretically proper to weight by value in computing the coefficient of dispersion. On the one hand, it may be urged that actual taxes are levied on a value basis, hence the coefficient of dispersion should be weighted by value in order to represent the inequality of the tax levy. Insofar as the real estate tax is a "benefit" tax, this argument is justified; insofar as it is an ability tax, it is not. For with respect to the latter, the importance of discrimination is greater in the

case of small property owners, to whom money has a higher marginal utility, than to wealthy and large property owners.⁸

Perhaps a more definite conclusion may be made on the basis of another approach to the problem. The purpose of ratio test studies should be to show the extent of inequality as amongst the majority of taxpayers,—to show the effectiveness or ineffectiveness of the performance of the function from the viewpoint of the great bulk of the community. From this point of view, weighting by value may distort the picture. For example, where assessments are well made for a small, wealthy minority, and very badly made for a vast majority, it would appear to be incorrect to give a high rating to such an assessment situation. Weighting by value in such a case would tend to make the coefficient indicate a better situation than, from the point of view of the majority of taxpayers, actually exists. To bring out this point, let us assume as an extreme case an industrial town wherein two-thirds of the total value of the property of the town consists of four large manufacturing plants owned by four large corporations, and the other third, of small properties owned by one thousand small taxpayers. The average assessment ratio is known to be 50 per cent. Now let us assume that the assessor applies to a state tax commission for an appraisal of the properties of the corporations, and that the tax commission appraises the properties at full value. The assessor then sets the assessments in the roll at one-half these valuations. A ratio test study is then made, covering all of the properties of the town. If the four large corporate properties are given weight on a value basis, the absence of any irregularity in their case (they are, it will be remembered, assessed uniformly at exactly the average ratio) will tend to make the coefficient of dispersion very low. Yet the rest of the property of the town might be assessed at all sorts of varying ratios and with great inequality. From the point of view of the majority of the taxpayers, a coefficient of dispersion which indicates good assessments under these conditions is a distortion of the facts.

In actual experience, the effect of weighting by value will not be so extreme as in the case described above. But in any event, giving equal weight to the holding of each property owner, regardless of the value of the property, results in an index *which is representative of the assessment inequality situation from the viewpoint*

⁸ A good case might be made for the proposition that regardless of the recognized importance of the benefit basis of the real estate tax for *justified* contributions, that *unjustified* contributions be given weight on an ability to pay basis. Thus it might be maintained that the importance of discrimination should be measured by the relationship of varying abilities to unjustified contributions. The logical conclusion of this viewpoint is to give greater weight to those cases where the effect of inequalities are psychologically most important, namely, to the owners of less valuable properties. But this assumes a correlation between small properties, and taxpaying ability which is not altogether justified, (a) because a wealthy taxpayer may, and often does, have a number of small holdings; (b) because some properties may be mortgaged while others are not.

of the majority of the citizens. It appeals to the writer, therefore, not only because of its more extensive usage and greater facility of computation, but also because it is a more appropriate index for investigatory studies of assessment inequality.

Bases of Comparison.—Four bases of comparison have been used in ratio test studies of assessment inequality: (a) owners' estimates; (b) expert appraisals; (c) valuations jointly made by owners and experts; (d) sales values.

By using owners' estimates as the basis of comparison, one may avoid the limitation of scarcity of data in times of depression which one would encounter if he attempted to use sales data at such times. However, it is not wise to test the fairness of an assessing system during a depression because of the uncertainty surrounding any possible basis of comparison under such conditions. Hence this relative advantage is slight. On the other hand, the use of the owners' estimate basis is subject to two rather substantial disadvantages. Once the owner is cognizant of the purpose for which the estimate is to be used, this knowledge cannot but have an effect upon him, and hence the estimate may not be an entirely disinterested one. Secondly, many owners will not evaluate their holding with careful consideration if their decision is of no real consequence to them. Certainly one would expect much more careful consideration and study if an individual were engaged in the process of making a sale than if he were naming a price for comparative statistical purposes.

Expert appraisals are usually obtained from real estate houses, mortgage firms, banks and insurance companies. In this case, careful, skilled consideration is usually given in order to arrive at a valuation, but other objections and limitations exist with respect to this basis of comparison. There are all sorts of commercial appraisal policies, ranging from the ultra conservative to the highly optimistic. More important, such information is usually given only on pledge of non-disclosure of individual items. This second consideration, this necessity for secrecy, is a rather serious limitation to the use of data from the files of real estate houses, banks and insurance companies for the testing of assessment inequality.

Sometimes the two variants have been combined in studies of rural assessments in such a manner as to eliminate most of the objections stated above. A specialist in farm economics from a state college of agriculture visits a farmer and together they work out the value of the farm. In this way, valuations are carefully arrived at under a uniform procedure. The chief objection to the use of this method is the expense and time involved in visiting farms. In other respects, it is productive of good results.

We come now to consideration of the sales value basis. The principal objection to its use is the dearth of reliable data during certain extreme points in the business cycle. But this obstacle is surmountable by sampling as to time. In other words, the test should be made as of a time period during which a substantial number of

sales have occurred under neither extreme depression nor extreme boom psychology. Used with discretion, and with unrepresentative sales, such as forced sales, transfers between members of a family, transfers which have been part of trades, etc., eliminated, this variant of the ratio study appears to be the best from several points of view. First, it permits of the collection and collation of large quantities of data at relatively small expense.⁹ Where sales exist in sufficiently large quantities, the sales variant is the most convenient of the four methods. Secondly, neither the owners' estimate value, the expert appraisal value, nor the combination value as used in farm studies, have the legal standing with the courts which sales value possesses. The former are valuations made by persons who are presumably better judges of true value than the assessors. They thus may be used as a basis of comparison for testing the fairness of assessments, but they do not command the legal respect which the courts have for sales values. For market or sales value is actually the value, either by statute or judicial construction, at which property is required to be assessed for taxation in the majority of the states.¹⁰ And sales value is not only the most common

⁹ This was particularly true in the period from 1917-1926, at which time the federal government imposed a tax of 50 cents on each increment of \$500 of owners' equity of real property transferred. Thus if the consideration was not stated, it could be calculated on the basis of the amount of revenue stamps affixed to the deed of transfer, plus mortgages existing prior to the transaction, if any. The tax was reimposed by the Revenue Act of 1932 and is in force at the present time.

¹⁰ For a tabulation of the statutory terms see the compilation in National Industrial Conference Board, *State and Local Taxation of Property*, 1930, pp. 96-102, or the table prepared by D. T. Rowlands at p. 89 of the *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII, 1930. The last named table is part of an article, "Commonly Accepted Evidences of Real Estate Value for Purposes of Taxation", in which the subject is discussed. For further discussion, see: "Report of the Committee of the Rhode Island Tax Officials Association appointed to investigate the subject of Valuation for Purposes of Taxation," in *Bulletin of the Rhode Island Tax Officials Association*, No. 15, Feb. 1, 1928, p. 6 *et seq.*; J. A. Zangerle, "An Analysis of Commonly Accepted Evidences of Real Estate Value for Purposes of Taxation," *Annals of Real Estate Practice of the National Association of Real Estate Boards*, 1930, p. 94 *et seq.*; and J. C. Bonbright, "The Valuation of Real Estate for Tax Purposes," *Columbia Law Review*, Vol. XXXIV, No. 8, Dec., 1934, p. 1397 *et seq.*

Prof. Bonbright has summarized the general judicial situation as follows: "Many definitions of value will be turned up by assiduous search through the court reports in tax cases—definitions ranging from such simple vacuity as 'the sum of the estimable qualities of a thing' to such sonorous bombast as 'a recognizable pecuniary value inherent in itself, and not enhanced or diminished according to the person who owns or uses it.' These are exceptions, however, to a well standardized formula which appears in most of the opinions. The formula, which has the sanctity both of great age and constant repetition, is that value means market value, which in turn is defined in some such words as 'the price which the property would bring in an open market on a free, not forced sale between a willing buyer and a willing seller.' A variation in the form of expression is occasionally found, to the effect that value is the amount which would be received by a creditor from a solvent debtor in payment of an honest debt." Bonbright, *op. cit.*, pp. 1402-1403. The last named variation is explained in a footnote. "This variation is per-

statutory and judicial basis of value, but also has been used widely for official equalization purposes by state administrative officers.¹¹ In fine, sales value is frequently the most convenient basis of comparison, and certainly the one which has received the highest degree of legislative, judicial and administrative sanction. As a matter of fact, it has received the highest vote by research investigators. Of all the bases, the sales value basis has been most extensively used in the investigations of assessment inequality which have been made.

^oThe Logic of the Arrangement of the States by Geographical Areas

The matter of the optimum arrangement of the states in order to present the most readily comprehensible picture of assessment conditions, and to facilitate the recognition of significant generalizations, was of considerable importance to the writer. Various bases of arrangement were considered. First to be rejected was arrangement by alphabetical sequence. For certainly there is no parallelism between the logic of the letters of the alphabet and the logic of assessments. Other bases of arrangement such as the character of the local administration, the degree and nature of state supervision, the nature of the physico-economic landscape, the degree of equality achieved, etc., would have been more suitable bases. But after due consideration, it was decided that an arrangement by geographical areas would be most appropriate. For although the geographical arrangement is not the best arrangement with reference to any one of the factors mentioned, it is the one which pays the most respect to the various demands of all.¹²

haps induced by a desire to take care of the situation where a ready market is lacking for a particular kind of property." *Of. also Zangerle, op. cit.*, p. 98, "Difficult as it may be to find a market value, authorities nevertheless agree that sales of similar property in the neighborhood is the best evidence, and nearly all courts consider this the first step in arriving at true value." Also the Report of the Committee of the Rhode Island Tax Officials Association, *op cit.*, p. 10: "It [normal sales value] is universally recognized by courts as the best evidence of value and in final analysis is the basis of nearly all expert opinions in such matters."

¹¹ For example, by Wisconsin, New York, Washington, Colorado, New Jersey, Ohio, Minnesota, Virginia, Kansas and Missouri.

¹² The general groupings used are the divisions of the United States Bureau of the Census.

CHAPTER III

THE NEW ENGLAND STATES

Maine

ASSESSMENT, REVIEW, AND EQUALIZATION.—Except for the unincorporated and unorganized “wild lands,” which are assessed by the county commissioners for purposes of county taxation and by the Bureau of Taxation in the Department of Finance for state purposes, real property assessments are made by town boards of assessors varying in composition from three to seven members. These officials are elected by popular vote either specifically for the office, or are members of the board of selectmen acting in an *ex officio* capacity. In either event, they are compensated for their assessing work on a per diem basis. Cities have their own assessment organization. The boards of assessors may review complaints and may make abatements on that portion of the tax which they may deem to have been levied unjustly. The county commissioners apportion the county tax upon the various towns and cities, and hear appeals on abatements. Appeal from the decisions of the county commissioners may be taken to the superior court, which may refer the case to the State Tax Assessor for a report on the facts. Provision is made for a state equalization of town and city aggregates

In 1931, as part of a reorganization of the administrative government of the state, a Bureau of Taxation (headed by the State Tax Assessor) in a newly-established Department of Finance, superseded the former Board of State Assessors as the chief administrative agency of the state tax system.¹ By this act the former tri-membered board was supplanted by a single executive, the State Tax Assessor (who is appointed by the Governor with the advice and consent of the council for a term of three years). By the same act, a new state board of equalization was established, composed of the State Tax Assessor as chairman, and two part-time associate members. The latter are forbidden to hold any other state or local governmental office.²

STATE SUPERVISION: POTENTIAL.—The statutory powers and duties of the State Tax Assessor with respect to supervision of local assessment are those formerly possessed by the Board of State Assessors. He has general supervisory powers over the local officials; is authorized to hold an annual convention of assessors at Augusta; and is directed to visit the counties for purposes of investigating their methods and conferring with them. For purposes of these investigations and conferences, the town assessors are obliged to meet at a designated place in the county, and give such reports, and answer such questions, as may be required of them.

¹ Laws of Maine, 1931, ch. 216, art. ii, sec. 29.

² Laws of Maine, 1931, ch. 216, art. ii, sec. 30.

The State Tax Assessor is authorized to investigate alleged cases of undervaluation and omission of property from the rolls, and to institute proceedings when necessary for the proper performance of the laws. He is also empowered to order the local assessors to reassess their jurisdiction in the event that the original assessment is deemed unsatisfactory; and in the event that the reassessment is still believed to be unfair, to appoint his own appraisers to make a new reassessment.³

STATE SUPERVISION: ACTUAL.—Although the statutory powers conferred upon the State Board of Assessors were extensive, the activities of this former board were not at all vigorous with respect to assessment of real property. Very few of its powers were exercised, and its most drastic power, that of reassessment, not at all.⁴ There is no reason to believe that the policy of the state with respect to supervision and control of local assessment has changed since the reorganization of 1931.

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*.—C. H. Merchant and M. S. Parsons have made a ratio study of farm assessments in a recent survey of the Maine farm property tax situation.⁵ Some 422 owners' estimates of farm properties were compared with their assessed valuations. A classification of the resulting assessment ratios is presented in Table I, by types of farm.

TABLE I
DISTRIBUTIONS OF SAMPLE RURAL ASSESSMENT RATIOS IN MAINE
BY TYPES OF FARM, 1924-1930.^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES					
	Average for 3 years, 1924-6	1926	1927	Average for 3 years, 1928-30	Average for 2 years, 1929-30	1930
Type of farm	Apple	Blueberry	Dairy	Potato (Aristook county)	Potato (Central Maine)	Poultry
Less than 20		13	4	14	1	1
20-29	7	40	16	60	7	4
30-39	13	24	30	36	2	4
40-49	18	18	15	6	5	9
50-59	10	9	7		2	3
60-69	2	11	4			3
70-79	7	3			1	3
80-89	2	2	1			
90-99						
100 and over	1	2	1			
Totals	60	122	78	116	18	28

^a Source: C. H. Merchant and M. S. Parsons, *Farm Property Taxation in Maine*, Maine Agricultural Experiment Station Bulletin 366, June 1933, p. 251.

³ Revised Statutes of Maine, 1930, ch. 12, secs. 5-7, 10, 18.

⁴ O. C. Hormell, *Maine Towns*. Bowdoin College Bureau of Research in Municipal Government, Publication No. 9, 1932, p. 81.

⁵ C. H. Merchant and M. S. Parsons, *Farm Property Taxation in Maine*, Maine Agricultural Experiment Station Bulletin 366, June 1933, pp. 248-253.

Some apple farms were assessed at less than 30 per cent of their estimated value, others at over 70 per cent; some blueberry farms were assessed at less than 20 per cent, others at over 100 per cent; some dairy farms were assessed at less than 20 per cent, others at over 70 per cent. The range of the potato farms of Aristook valley was from less than 20 per cent to over 40 per cent; of those in Central Maine from less than 20 per cent to over 70 per cent; of the poultry farms, from less than 20 per cent, to over 70 per cent. These ranges give some idea of the wide variations in the assessment of farms in Maine. The average variation within each type is best indicated by the coefficients of dispersion. These coefficients were 28.0 per cent for the apple farms, 40.5 per cent for the blueberry farms; 28.2 per cent for the dairy farms; 22.0 per cent for the potato farms of the Aristook valley; 50.4 per cent for the potato farms of Central Maine, and 35.7 per cent for the poultry farms.⁶

The meaning of these ranges and coefficients is this: Instead of assessments being made uniformly, and everyone taxed equally according to the value of their property, as is the intent of the law, some assessments were found to be made at less than 20 per cent and others at over 100 per cent; and some taxpayers were found to be paying two, three, four and even five times as much as others on the same value. These are extreme cases, but even on the average, the situation disclosed was very bad. For example, in the period 1924-1926, one might have selected at random two apple farms of \$10,000 value. In the average situation, one would have been assessed at \$5,600, the other at \$4,200, equivalent to, on a 100 per cent basis of assessment, \$11,400 and \$8,600 respectively.⁷

Or one could have chosen two blueberry farms at random in 1926, each worth \$10,000, and instead of finding both assessed at \$10,000, would have found, "most probably," one of the farms assessed at \$4,600, the other at \$3,000. On a 100 per cent basis of assessment, which is really the correct basis for measuring inequality (see Methodological Introduction, p. 17, *supra*), the assessments would have been \$12,100 and \$7,900 respectively.⁸

These examples are illustrative of the general average situation with respect to assessments of apple and blueberry farms. In the case of the dairy farms, the effect of inequality as shown by the coefficient of dispersion on a 100 per cent basis would make two farms worth \$10,000 be assessed at the equivalent of \$8,600 and \$11,400; in the case of potato farms of the Aristook valley, at the equivalent of \$11,000 and \$8,900; in the case of the poultry farms, at the equivalent of \$8,200 and \$11,800; in the case of potato farms of Central Maine, at the equivalent of \$12,500 and \$7,500.

⁶ Computed by the writer on the basis of Table I.

⁷ The average assessment ratio was 48.67 per cent; the average deviation 13.6453 per cent. Figures have been given in round sums, as is the general practice in assessing.

⁸ The average ratio was 38.09 per cent, the average deviation 15.649 per cent.

Regressivity.—In addition to the lack of uniformity described above, it was found that there was a pronounced tendency to assess the less valuable properties at a higher ratio than the more valuable farms. This was revealed by a classification of the data by value classes, as shown in Table II.

TABLE II

RELATION OF VALUE OF FARM TO ASSESSMENT IN MAINE, 1924-1930^a

Value of farm	Number of farms	Assessment ratio
Less than 5,000.. . . .	127	40 34
5,000- 9,999.....	116	39.39
10,000-14,999.....	52	34 99
15,000-19,999.....	34	27 03
20,000-24,999.....	24	29 52
25,000-29,999.....	22	29 21
30,000-34,999.....	14	29 56
35,000-39,999.....	7	29 56
40,000-44,999.....	11	27 50
45,000-49,999.....	4	18 11
50,000 and over.	11	22 52
Total and average.	422	30 29

^a Source. Merchant and Parsons, *op. cit.*, p. 251.

Examination of this table shows that properties worth less than \$5,000 were proportionally assessed on the average at approximately twice as much as those worth over \$45,000. Assuming that the number of properties in each class of this sample bears a rough relationship to the total number of properties of each class, it indicates that the vast majority of taxpayers are being overtaxed because of the relative underassessment of the more valuable properties. The situation shown by the table is tantamount to varying the tax rate (in an irregular fashion), inversely to the size of the tax base, or regressivity. Combined with widespread inequality, it is a phenomenon which makes the present assessment situation highly unjust and the tax burden on the mass of taxpayers heavier than it should be.

Assessment Practices in Municipalities.—The evidence on assessment conditions was confined in the Merchant-Parsons study to the farm situation. On the other hand, O. C. Formell in a recent volume on local government in Maine has emphasized the poor quality of assessment administration in the various municipalities of the state:

“The valuation of real estate is often made in the office of the assessors, where year after year the valuation on a given piece of

property is copied from the valuation of the previous year. The rise in value brought about by changing conditions—popularity of residential districts, etc., and the decline in value on account of deterioration, or shifting of the location of the business section, are thus overlooked. Changes from year to year generally occur only when the taxpayer becomes aggrieved and enters complaint. Such a situation tends to make the valuation each year become more unequal and unjust.

“The law requires a revaluation at least once in ten years, but the municipality which in the last twenty years has had a thorough going revaluation is the exception rather than the rule. The assessors elected by popular vote are of the opinion that an assessor making a revaluation could not hope for re-election. Furthermore, the average selectmen acting as assessors cannot possibly give the time necessary for a thorough revaluation.

“The law further provides that land shall be assessed separately from buildings. Nominally to comply with the law the assessors in many towns in the beginning arbitrarily separated the total valuation into two parts, the one representing land, the other buildings, with nothing more than a rough guess as a basis for the separation. These guesses in many instances have been copied year after year with no investigation concerning the relative value of land and buildings.

“Furthermore, property listed on the tax roll is often inadequately described. Without a clear description, parcels of real estate often escape the tax roll, and likewise tax deeds are worthless.”^o

New Hampshire

ASSESSMENT, REVIEW AND EQUALIZATION.—While the law provides for the selection of three assessors to co-operate with the selectmen of the towns, in practice the latter generally perform this function without such assistance. Cities, however, usually have boards of assessors, commonly composed of three members. The town board of selectmen has the power to abate such portions of the tax as appear, after a hearing, upon complaint, to have been unjustified. Appeals from the decisions of the town boards may be taken to the superior court of the county, which is authorized to refer them to the Tax Commission for a report on the facts of the case. This report is not binding on the court, the latter having the power to reject it, or to recommit the case for further study. As in most of the New England states, there is no county review or equalization (the county is of very slight importance in this part of the country). The State Tax Commission is authorized to make a biennial state equalization, by towns and cities. In actual practice, however, the commission has instead pursued a policy of continuous supervision and reassessment.

^o Hormell, *op. cit.*, pp. 76–77.

STATE SUPERVISION: POTENTIAL.—The composition and method of selection of the commission is unusual. Only one of its members, the secretary, is a full-time official, the other two being part-time. And instead of being appointed by the chief executive officer of the state, as is ordinarily the case, the members of the New Hampshire Tax Commission are selected by the chief judicial body, the Supreme Court. All of the members hold office for six years. In addition to general supervision and the preparation of assessment forms and books, the tax commission is empowered to require reports; to confer with, advise and instruct local assessing officials and to call meetings for such purposes; to examine into cases of alleged omission, fraud, inequality or impropriety; to order the local assessors to reassess; and, in the event that results satisfactory to the Tax Commission are not achieved, to make the reassessment with its own personnel or agents. The Tax Commission does not have the specific power to institute removal proceedings against local officials, but it is charged with the duty of directing proceedings to enforce the law relating to liability and punishment for failure or neglect to comply with the laws of the State.¹⁰

STATE SUPERVISION: ACTUAL.—An unusually vigorous reassessment policy, especially for a New England state, has obtained in New Hampshire during the past two decades. From 1926 to 1931, from ten to twenty reassessments have been made each year. In 1932, five were completed, and in 1933, the same number. The commission has an appraiser who is on a full-time salary basis, and ordinarily engages three or four other men throughout the year for the purpose. Usually the reassessments are requested by the local assessors, and in practically every case, are made in co-operation with them.¹¹

RECENT ASSESSMENT CONDITIONS.—A recent field investigation of assessments, made by the Institute for Government Research of the Brookings Institution in its survey of government in New Hampshire, found the assessment situation very unsatisfactory. Although the activities of the state tax commission are praised very highly, the local assessing machinery is sharply criticized, the report dwelling at length on the inadequate use of maps and sales records, and on the absence of definite methods of procedure for utilizing such objective data as do exist. Ratio tests are mentioned, although specific data are not described.

"While fragmentary, such assessment studies as are available indicate that the standard of property assessments has been rising since the State Tax Commission came into existence and that there has been a gradual contraction of the scatter of assessment ratios of towns over the same period. These accomplishments have come

¹⁰ Public Laws of New Hampshire, 1926, ch. 68, secs. 11, 12.

¹¹ Data from the *Twentieth Annual Report of the New Hampshire Tax Commission*, 1930, and letters from Mr. E. C. Hirst, Secretary of the State Tax Commission of New Hampshire, dated July 11, 1934, and from Mr. John G. Marston, of the staff of the commission, dated Sept. 4, 1934.

about by the development of a high degree of intelligent co-operation between the State Tax Commission and selectmen. New Hampshire has achieved through their efforts as good a record for full value and uniformity in property assessments probably as any other state which still retains the town as the assessment unit. These results have come not because of the character of New Hampshire assessment procedure but in spite of it. Able, vigorous, and conscientious tax commissions with independence from political influence have succeeded in building up a relationship with some 235 assessing bodies by means of which creditable results have been achieved in the face of almost insuperable obstacles.

"On the other hand, these studies indicate clearly that much still remains to be done before assessments are made on as high a standard as is attainable. Existing defects in property assessments undoubtedly inhere in the practices and methods of making the original assessments.

* * *

"Other than the preceding year's blotter book and such general information as the selectmen have personally, there is generally no assessment information. Some towns and cities have or are preparing tax maps, and in this they are wisely encouraged by the State Tax Commission. The movement is sporadic and, except for those prepared under the supervision of the State Tax Commission and the university, the maps are purely quantitative, showing the land area and its superficial divisions and the number of areas owned by each individual. Such maps are adequate for city assessments but in rural sections do little more than prevent escape of land from assessment.

* * *

"Preparation of assessment maps and through them the attainment of uniform full value assessment of land areas require sales data in such form as to permit ready use in assessing property. Lack of such information appears to be the weakest link in the assessment procedure. Some assessing boards obtain from the county register of deeds a record of real estate transfers which they keep on file. The city of Manchester has a comprehensive file of deeds, mortgages, and permits. Since recorded deeds do not disclose the true consideration, such a file serves only to keep the records of ownership of property up to date. Most selectmen obtain no deed records. The small size of the towns, however, enables the selectmen to keep in touch with local real estate transactions. Information so derived provides a background for purposes of assessment. Together with the assistance of the State Tax Commission, this general information appears to be the source of valuation data for assessment.

"While the assessment experience of New Hampshire indicates that fullest use has been made of the valuation information available, such information is inadequate for scientific appraisal. Assessors, even with such advanced practices as exist in Manchester, are at a loss to know how to use the information they have. Some

undertake to place the assessment of any parcel of real estate transferred at the value of its most recent sale and stop there. Others are unwilling to apply recent sales values to any property, realizing that it tends to destroy the uniformity of the assessment of other property. They make adjustments in the sales values to make them conform with what they think is the prevailing ratio of assessed to true value of other property. In short, no procedure has been developed by which the sales data which is available can be converted into standards of valuation which can be used to redetermine each year the full and true value of all land assessed.

"Valuation of land therefore simmers down to the judgment of assessors and their knowledge of land values reinforced by the pressure of the State Tax Commission to achieve uniform full value assessments. In some cases selectmen use their judgment and knowledge to fix unit values and apply them to the classification of property which they make for their towns. Generally, each taxpayer's property is assessed as a unit. Except for the influence of the State Tax Commission, conditions with respect to the procedure for valuing property shows only slight improvement over that existing in 1908."¹²

Vermont

ASSESSMENT, REVIEW AND EQUALIZATION — Real property is assessed quadrennially in Vermont by a rather typical New England multi-membered town board of assessors. In this state it is called the town board of listers, and is composed of three members, one elected each year at the annual town meeting for a term of three years. The board of listers not only makes the initial assessments but also hears and decides grievances. Appeals from its decisions may be taken to another town board called the board of civil authority. This latter body is composed of the selectmen and the town clerk in the towns; the mayor, aldermen and justices in the cities; and the trustees and justices in the villages. From the decisions of the board of civil authority appeal may be taken to the State Tax Commissioner, who refers them to a board of three appraisers appointed by him (with the approval of the Governor) for such reviewing purposes. These appraisers must be residents and taxpayers in the county where the appeal originated, and are required to hear all subsequent appeals arising in that county against the quadrennial assessment. They make a report to the State Tax Commissioner, who immediately forwards it to the town clerk, and the appraisal, as fixed by the above-mentioned appraisers, becomes a part of the grand list or assessment roll. There is no provision for state equalization.

¹² Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State, County and Town Governments of New Hampshire*, 1932, pp. 520-522. The year 1908 is specifically mentioned because that was the date of the last prior comprehensive survey of assessment conditions in New Hampshire.

STATE SUPERVISION: POTENTIAL.—The State Tax Commissioner, who heads the State Tax Department, is appointed by the Governor, with the advice and consent of the Senate, for a two-year term. His statutory powers and duties with respect to assessments are of an advisory and educational nature for the most part. Thus, he is directed to confer with and advise the listers as to the proper performance of their duties, and to furnish them with printed instructions and directions. He is also directed to call meetings of the listers to be held at places and times designated by him for purposes of instruction, the attendance of the local officials being compulsory. But with the exception of the minor duty of preparing assessment blanks and books, and the power to require reports from the listers, the statutory powers of the commissioner are limited to these educational functions¹³ He does not possess any of the more drastic powers of state supervision and control such as reassessment or removal.

STATE SUPERVISION: ACTUAL.—In the light of these limited statutory powers, it is not at all surprising that assessment in Vermont is almost entirely a local affair. Even in the case of the matter of appeals, where the state apparently participates through the appointment of the appraisers by the State Tax Commissioner, this participation is very slight because the appraisers must be residents of the county; are in no respect agents of the tax commissioner; and indeed the jurisdiction of the commissioner ceases at once after the appointment has been made¹⁴

RECENT ASSESSMENT CONDITIONS.—Detailed information with respect to assessment inequality is lacking in this state. However, the following excerpt from a recent report of the Vermont Tax Commissioner is indicative. The following statements were made by the Tax Commissioner in a discussion of the inequality of the levy of the state tax on property:

"It is a matter of common knowledge which the commission has had occasion to verify in a number of instances that little, if any, property in Vermont is appraised at its just value in money. The few instances of full value appraisals which have been brought to the attention of the commissioner have arisen either through error or prejudice. Some listers, with a full knowledge of the law, have set up a local standard of real estate valuations based upon a percentage of what they believe to be a fair or market value. Complete facts are not available but from statements of listers and from actual observations and comparisons made by the commissioner it would appear that the range of valuation in the appraisal of real estate in Vermont ranges from 30 per cent to 80 per cent of actual

¹³Public Laws of Vermont, 1933, secs. 576-582.

¹⁴Letter from Mr Erwin M. Harvey, Commissioner of Taxes of Vermont, under date of June 12, 1934. Incidentally the number of these appeals is not very large. For the last quadrennial assessment, Mr. Harvey has informed the writer, there were approximately twenty-three appeals spread over eight counties.

values. From such so-called 'standards' individual cases range as low as 25 per cent and as high as 90 per cent of the just value provided by statute."¹⁵

Massachusetts

ASSESSMENT, REVIEW, AND EQUALIZATION.—It has been said that the local boards of assessors in this state "perform the functions and have the powers of assessors, auditors, equalizers, local boards of review, and local boards of appeal."¹⁶ These boards are composed of either three or five members in the towns, and of three, five, seven or nine members in the cities. In the towns, they are either elected by popular vote or appointed by the selectmen, for three year terms. In the cities, they are in some cases appointed by the mayor or the council, while in others they are elected by popular vote. These boards hear complaints and may grant abatements. Appeals from their decisions may be taken either to the county commissioners or to the Board of Tax Appeals. The latter is a quasi-judicial body, modeled somewhat after the federal Board of Tax Appeals, with jurisdiction over twenty-seven varieties of cases, including property, income, inheritance and corporation tax cases. When first established, it was composed of three members, appointed by the governor. In 1933, it was enlarged by the addition of two more members.¹⁷ Its decisions in the matter of assessments are final except on matters of law. If the appeal is taken to the county commissioners, further appeal on questions of valuation may be taken to the courts.

Provision is made for a state equalization of town and city aggregates. This equalization is to be made by the Commissioner of Corporations and Taxation, who is appointed by the Governor with the advice and consent of the council for a term of three years.

STATE SUPERVISION: POTENTIAL.—The powers of supervision over assessments granted by the statutes to the Commissioner of Corporations and Taxation are largely of an advisory nature. He is directed to prepare assessment forms, and to issue printed instructions annually. He is authorized to construe the laws, and may visit the localities to investigate their work. He may direct the assessors to adopt methods of keeping records for assessment purposes, and upon their failure to comply, to notify the mayor or selectmen of the jurisdiction affected. He may recommend a reassessment but cannot order such to be made. The power of removal is not specifically granted, although he is authorized to "cause an assessor

¹⁵ *Biennial Report of the Commissioner of Taxes of Vermont for the term ending June 30, 1928*, p. 5.

¹⁶ United States Bureau of the Census, *Digest of State Laws Relating to Taxation and Revenue*, 1922, 1924, p. 179.

¹⁷ Acts of 1933, ch. 321. For more detail on the Massachusetts Board of Tax Appeals, see Massachusetts Department of Corporations and Taxation, Division of Local Taxation, *Instructions to Assessors No. 13*, 1931, pp. 5-18.

to be prosecuted for any violations of law relative to assessment for which a penalty is imposed."¹⁸

STATE SUPERVISION: ACTUAL.—In keeping with the general spirit of the law, the activities of the Tax Commissioner have been of an advisory and guiding nature. There is a state association of assessors and twelve county associations with whom the Tax Commissioner meets twice a year for purposes of education and stimulation. Moreover, there is a field staff of four supervisors, each assigned to a definite district and charged with the duty of visiting all of the towns and cities within his respective jurisdiction as often as necessary to see to it that the assessors and collectors perform their duties properly. These supervisors check on the general financial situation of the towns, the granting of abatements and kindred matters, as well as assessment work and methods. They report each week to the commissioner, who, on his part, keeps them posted on new laws, new court decisions, rulings of the Board of Tax Appeals, and on current tax matters in general. This information is relayed on to the local assessors by the supervisors.¹⁹

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*.—Evidence on the assessment situation in Massachusetts is largely confined to the rural areas. A ratio test study has been made by Hubert W. Yount.²⁰ The data consisted largely of farm management records, wherein farm values had been estimated by a representative of the Massachusetts Agricultural College working together with owners. A total of 255 farms, 214 farms from eight towns in 1923, and 41 farms in two towns in 1922, distributed over five counties, constituted the sample.²¹

The data for six towns were classified according to the ratio of assessed value to estimated value with results as shown in Table III.

¹⁸ General Laws of Massachusetts, 1932, ch. 58, secs. 1-8; ch. 59, sec. 76.

¹⁹ Letter from Mr. Henry F. Long, Commissioner of Corporations and Taxation, dated June 22, 1934, including photostatic copies of weekly reports of supervisors, and *Annual Report of the Commissioner of Corporations and Taxation for the year ending Nov. 30, 1930*, p. 189.

²⁰ H. W. Yount, *Farm Taxes and Assessments in Massachusetts*, Massachusetts Agricultural Experiment Station Bulletin No. 235, April 1927, pp. 90-111.

²¹ The towns were Sheffield and Hancock in Berkshire county; Shelburne, Heath, Conway and Ashfield in Franklin county; Sterling in Worcester county; Littleton and Boxborough in Middlesex county; and Gianville in Hampden county. Owners' estimates constituted the basis of comparison for the 1922 data.

TABLE III
DISTRIBUTION OF SAMPLE RURAL ASSESSMENT RATIOS IN MASSACHUSETTS, 1923 ^a

ASSESSMENT RATIO	Number of properties
10.0- 19.9	3
20.0- 29.9	8
30.0- 39.9	23
40.0- 49.9	43
50.0- 59.9	43
60.0- 69.9	31
70.0- 79.9	24
80.0- 89.9	7
90.0- 99.9	1
100.0-109.9	1
	184

^a Source: H. W. Yount, *Farm Taxes and Assessments in Massachusetts*, Massachusetts Agricultural Experiment Station Bulletin No. 225, April 1927, p. 97.

The ratios ranged from under 20 per cent to over 100 per cent. On the basis of this table, J. W. Martin and C. M. Stephenson have computed the coefficient of dispersion, the measure of average inequality. It was found to be 23.76 per cent.²²

On the average, in the year and towns selected for the test, if one had at random chosen two farm properties worth \$25,000, he would have found that instead of both properties being assessed at the "full fair cash value" required by the law of Massachusetts that one was assessed at \$14,400 and the other at \$12,600. This is equivalent to one assessment at \$28,000 and the other at \$22,000 on a 100 per cent basis.²³ Moreover, he would have found, had he looked further, some properties worth \$25,000 assessed at \$10,000, while others worth no more were assessed at \$20,000. He might even have found some properties worth this sum assessed at \$2,500 and others at \$25,000.

Inter-Town Inequality.—In addition to the inequality of assessment as amongst individual properties, the average ratios of the towns were found to vary considerably. This was revealed by a classification of the data as shown in Table IV.

²² J. W. Martin and C. M. Stephenson, "Aspects of the Movement Toward Separation of Sources of State and Local Revenue," *The Tax Magazine*, February 1933, pp. 80-81.

²³ These figures are in round sums as is the usual practice in assessing. The average assessment ratio was 54.1 per cent.

TABLE IV

AVERAGE ASSESSMENT RATIOS OF SAMPLE TOWNS IN MASSACHUSETTS,
1922-1923 ^a

TOWN	Number of proper- ties	Assess- ment ratio
1.....	42	62.4 ^a
2.....	22	58.9
3.....	19	56.7
4.....	29	53.7
5.....	25	52.5
6.....	20	45.3
7.....	47	42.7
8.....	10	41.9
Total and average.	214	53.0
9 ^b	22	50.1
10 ^b	19	60.2
Total and average	41	55.1

^a Source H. W. Yount, *op. cit.*, p. 94.^b Values as of 1922.

This classification revealed another type of injustice, namely, inter-town inequality in the levy of the county tax. Residents of Town 1 paid much more than their proper share of county government expenses than residents of Town 8. The effect of this type of inequality was to aggravate the unfairness of the assessment situation still more.

Assessment Practices.—The evidence provided by the ratio test is supplemented by a description of rural assessment practices in Massachusetts. Declares Yount:

“In too many rural towns assessed values have not been changed for years, in some cases not for generations. An instance was recently reported where the assessment of a farm in southeastern Massachusetts had not been changed in nearly 100 years. In the Connecticut Valley where some of the best farm land in the state is located, the assessed valuations of many parcels of high-priced market-garden, tobacco and onion land have not been revised for ten or fifteen years. In other towns, assessments have been revised as property values increased, with inequalities as between towns as the result. Occasionally, assessors will revalue a property only after a sale, and in such cases there is resulting inequality between properties in the same town. New buildings are usually valued at a higher percentage of their actual value than farms with old buildings. As a result, farm property with good, well-kept buildings is valued at a higher percentage of actual value than farms with old

buildings. This was shown by the records in every town with sufficient records to furnish a fair sample.²⁴

After calling attention to those aspects of the situation which seem to him as the most important causes of present inequitable assessment conditions: the lack of knowledge of factors of value on the part of assessors; the problems of changing land utilization (for example, the shift from farm to suburban uses); the desire on the part of the local officials to evade part of the county levy; discriminations against non-resident owners; and a general feeling that high assessments mean high taxes, Yount concludes with the following words:

"Fair assessment calls for skilled appraisal, and it cannot be expected that assessors who spend only a short time each year at their duties, and who are elected for no more reason than that they are well-known and respected citizens, can perform their duties in expert fashion."²⁵

Connecticut

ASSESSMENT, REVIEW, AND EQUALIZATION.—The assessment interval of Connecticut is unusually long, revisions being required only decennially. However, some towns usually assess quinquennially, and others make revisions at still smaller intervals. Most commonly, a board of assessors, composed of three members, elected for terms of three years (one at each annual town election) assesses the real property of the towns.²⁶ A number of the cities and towns, however, have an appointive assessor or board. Complaints are heard and adjustments made by a board called the town board of relief. This board is composed of from two to five members, usually three, elected by popular vote. Appeals from its decisions may be taken to the superior court of the county. The state tax, when levied, is made upon the basis, not of the assessment rolls, but on the basis of local tax collections. Specifically, the state tax is apportioned to each town in the same proportion that local taxes collected (plus taxes on shares of stock of bank, trust and insurance companies and taxes which would have been levied on certain property exempt from local taxes) as averaged for three years bears to the aggregate local taxes collected (plus taxes on shares of stock of bank, trust and insurance companies and taxes which would have been levied on exempt property) as averaged for three years.²⁷ Because of the use of this basis of apportionment, no state equalization of locally made valuations is made, although there is a state board of equalization in existence.²⁸

²⁴ *Ibid.*, pp. 97-99.

²⁵ *Ibid.*, p. 111.

²⁶ Where elections are held biennially, their terms are four years, two being elected at one election and one at the next.

²⁷ General Statutes of Connecticut, 1930 Revision, sec. 1260.

²⁸ The State Board of Equalization is composed of the Tax Commissioner, the Treasurer and the Controller. The apportionment by expenditure basis was introduced in 1915. Equalization of the local assessed valuations for purposes of determining the relative shares of state aid for the smaller towns

STATE SUPERVISION: POTENTIAL.—The State Tax Commissioner, who is the administrative head of the state tax system, is appointed by the Governor with the advice and consent of the Senate for a term of four years. His powers and duties are limited by statute chiefly to advice and guidance. He has general supervisory powers over the local officials; is directed to furnish forms for their use; and may require reports from them. He is also required to visit the towns, either personally or by authorized agent, to inspect the work of the assessors and boards of relief. Much further than this he cannot go. He does not possess the power to make reassessments, nor to order the local officials to reassess. He cannot order the removal of local officers, but he is authorized to compel compliance of the local officials with the law, by requesting the judge of the superior court of the county to issue a writ of mandamus against non-complying officials (in the event that such officers fail to obey the order of the Tax Commissioner after the latter has called their attention to their delinquency).²⁹

STATE SUPERVISION: ACTUAL.—The Tax Commissioner of Connecticut, as is true of most of the state tax officials of New England, functions chiefly as an advisory officer with respect to local assessment. County conferences, and general advice and guidance constitute his principal activities. The Tax Commissioner of Connecticut has been especially active, however, in urging that technical methods of assessment be adopted and many of the cities and towns of the state have followed this recommendation.

RECENT ASSESSMENT CONDITIONS.—*Urban*.—Due, in good part, to the exhortations of the Tax Commissioner, much progress toward the establishment of modern assessing systems has been made in Connecticut municipalities in recent years. In 1928, the Commissioner reported as follows:

"Connecticut municipalities are in the midst of a new and modern era in administering the laws governing assessment of property for local taxation. The old has given way to the new, and the transformation has brought about remarkable and far-reaching benefits to the taxpayers and to the communities. Science and modern business methods have been applied with marked success to the plans and practices of the assessors, and the idea has been firmly planted in this state that property assessments should no longer be subject to inadequate or frail systems, or to whim and fancy of assessors, but that they should be the result of painstaking study.

"Of late years, with demands for municipal expenditure ever on the increase, growing attention has been focused on the problem of tax equalization. This has caused a general demand for improved assessing methods, and the result has been the installation of sound,

of the state continued in existence until 1931, at which time the size of the "grand list" was abandoned as the basis for such equalization of state aid. At the present time the State Board of Equalization is entirely inactive. Letter from Mr. W. H. Hackett, Tax Commissioner of Connecticut, under date of June 13, 1934.

²⁹ General Statutes of Connecticut, 1930 Revision, secs. 1088, 1089, 1092.

fair tax plans upon which may be built municipal financial structures which will last for generations. The main fault heretofore has not necessarily been due to the assessors, because they have been operating under many handicaps, with insufficient data or maps, and for little compensation. It is the system that stands indicted, and, by correcting the system, improved assessing methods must follow. The importance of this effort cannot be over-emphasized. It is one of the most vital municipal problems of today—if not the most vital.

"A review of the work that has been going on in Connecticut in the last few years presents a picture which tells in graphic figures the story of how tested, fair tax methods have replaced disorder and distrust in the administration of the assessment laws. The size of the work can be better appreciated when it is seen that more than \$400,000 has been spent by nineteen Connecticut municipalities in the last several years to engage the services of expert appraisal organizations to overhaul their local assessing offices.

"It should be borne in mind, however, that towns have been compensated for this expenditure, in some cases completely and in others in a large measure, by the addition of newly-discovered property not previously reached by the assessing authority. Proper mapping of every parcel of land in the town corrects all deed discrepancies, where the usual reference is such as '90 acres more or less,' and has brought into the tax lists properties never before assessed."

In 1930, further information as to the progress of assessments in Connecticut was reported. Nine more municipalities undertook "scientific" revaluations.³⁰ Further progress was reported in 1932. Stated the Tax Commissioner in his report for the biennium 1931-1932:

"When the work of revaluing the property in Stamford shall have been completed, about 44 per cent of the state's grand list will be subject to taxation by assessment plans of which little was known in Connecticut a dozen years ago. Approximately 42 per cent of the state's population reside in this group of towns. Old Lyme is the least populous and Bridgeport is the most populous of the towns of the group. Maps made by aerial surveys are in use in twenty-three of the towns of which this group is composed, boundary lines of all separate parcels of land being delineated on the maps so in use."

³⁰ Connecticut Tax Commissioner, *Information Relative to the Assessment and Collection of Taxes, 1928*, Taxation Document No. 232, Dec. 1928, p. 6. New Britain had made a "scientific" revaluation for its assessment of 1920; Winchester for 1924; Berlin, East Haven, Manchester, Middletown and Saybrook for 1925; Rocky Hill and West Haven for 1926; Bridgeport, East Hartford, Portland, and Putnam for 1927; Bloomfield, Norwich, Plainville, Southington, Torrington, and Windsor for 1928. *Ibid.*, pp. 14-15.

³¹ Derby, Essex, Greenwich, Meriden, New London, Norwalk, Old Lyme, Old Saybrook, Windham. Connecticut Tax Commissioner, *Information Relative to the Assessment and Collection of Taxes, 1930*, Taxation Document No. 238, Jan. 1931, p. 7.

³² *Report of the Tax Commissioner for the Biennial Period 1931 and 1932*, 1932, p. 13.

Apparently then, considerable progress, chiefly in urban assessment administration, has taken place in Connecticut in recent years.

Rural—Individual Inequality.—With respect to the rural situation, Professor M. Slade Kendrick has made a ratio test of inequality.³³ Owners' estimates were compared with assessed valuations in this study, the estimates being obtained by questionnaire. Questionnaires were mailed to 1,200 farmers in 29 towns, 283 of the 400 replies being found usable. When the assessment ratios were computed and classified, the results were as shown in Table V.

TABLE V
DISTRIBUTION OF SAMPLE RURAL ASSESSMENT RATIOS IN CONNECTICUT, 1930^a

ASSESSMENT RATIO	Number of farms
Under 20 per cent	2
20-29.9	16
30-39.9	24
40-49.9	46
50-59.9	45
60-69.9	42
70-79.9	40
80-89.9	32
90-99.9	15
100 and over	21
	283

^a Source: M. Slade Kendrick, *Taxation in Connecticut*, Storrs Agricultural Experiment Station Bulletin 166, Sept. 1930, p. 157.

As can be seen from examination of this table, assessments were made far from uniformly, the ratios ranging from less than 20 per cent to over 100 per cent. On the basis of these figures, J. M. Martin and C. W. Stephenson have computed the coefficient of dispersion, the measure of average inequality. This figure was found to be 29.40 per cent.³⁴

The meaning of these figures is made more clear by concrete application,—for example, to any two properties both worth \$25,000, selected at random. The "most probable" situation would be to find not each assessed at their "fair market value" as the Connecticut law requires but one at \$14,400 and the other at \$17,400, equivalent

³³ M. Slade Kendrick, *Taxation in Connecticut*, Storrs Agricultural Experiment Station Bulletin 166, Sept. 1930, pp. 154-158.

³⁴ J. W. Martin and C. W. Stephenson, "Aspects of the Movement Toward Separation of Sources of State and Local Revenues," *The Tax Magazine*, Feb. 1933, pp. 80-81.

to \$21,800 and \$28,700 respectively on a 100 per cent basis.³⁵ This is a description of the average. For properties worth \$25,000 there were plenty of worse pairs of assessments than these, if the sample test is representative. According to the table, some property owners were taxed at even five times as much as others owning equally valuable property!

Regressivity.—In addition to inequality, regressivity was found to exist. Table VI shows a classification of the 283 farms by value of farm.

TABLE VI

RELATION OF VALUE OF FARM TO ASSESSMENT RATIO IN CONNECTICUT, OWNERS' ESTIMATE BASIS OF COMPARISON ^a

VALUE OF FARM	Average assessment ratio
Under \$5,000	79 3
5,000- 9,999	69 5
10,000-14,999	69 1
15,000-19,999	53 8
20,000-24,999	62 2
25,000-29,999	65 5
30,000-34,999	56 6
35,000-49,999	60 3
50,000 and above.	37 0

^a Source. Kendrick, *op. cit.*, p. 157.

Whereas farms estimated at less than \$5,000 were assessed at almost 80 per cent of their value, those worth over \$50,000 were assessed at an average of less than 40 per cent. There was a good deal of irregularity in the trend, but the tendency for the assessors to overtax the less valuable properties was pronounced and definite.

Similar findings were made by Dr. G. B. Clarke in another ratio study of assessment conditions in Connecticut. Recent sales records of 132 parcels in two towns constituted the sample. Much inequality and regressivity were revealed. Table VII shows the results of the study with respect to the latter.

³⁵ In round numbers, as is the general practice in assessing. The figures are based on Martin and Stephenson: average assessment ratio, 63.6 per cent; coefficient of dispersion, 20.40 per cent.

TABLE VII

RELATION OF VALUE OF FARM TO ASSESSMENT RATIO IN CONNECTICUT,
SALES BASIS OF COMPARISON ^a

VALUE OF PROPERTY	TOWN A		TOWN B	
	Number of farms	Average assessment ratio	Average assessment ratio	Number of farms
\$0-\$2,000	35	94 98	94 73	27
2,001- 4,000	15	68 77	83 38	21
4,001 and above	13	46.93	70.90	21

^a Source: Letter from Dr. G. B. Clarke, Associate Professor of Agricultural Economics, Connecticut State College, under date of Aug. 23, 1934.

In Town B, regressivity was not quite so pronounced as in Town A, where farms of less than \$2,000 value were assessed at twice the rate, in effect, of farms worth over \$4,000, but it was still very substantial.

Summary.—The assessment situation in Connecticut has been summarized by the Connecticut Special Tax Commission, of which Prof. Fred R. Fairchild is chairman, as follows:

"Such statistics as are available support the contention of those familiar with assessment results in the state that wide variations exist in the relation of assessed to true values among and within the towns of the state. From reports of the assessors themselves it is apparent that underassessment is—or at least was prior to the depression—the rule rather than the exception, and it is a well-established fact that, where underassessment prevails, inequalities in assessment are likewise prevalent. Studies conducted at the Storrs Agricultural Experiment Station, in the office of the Tax Commissioner, and by this commission, as well as the scientific reappraisals recently conducted in several towns of the state, all point to the same conclusion. Much tangible personal property is unassessed, and much real and personal property as is assessed is listed at widely varying proportions of true value. Such conditions evidence wholesale disregard for the law and wide departure from equity in the distribution of the property tax burden."³⁸

³⁸ *Summary of the Report of the Connecticut Temporary Commission to Study the Tax Laws of the State and to Make Recommendations Concerning their Revision*, 1934, p. 39.

Rhode Island

ASSESSMENT, REVIEW AND EQUALIZATION.—The typical New England town board of elective assessors, varying in this state from three to seven members, annually revise assessments in Rhode Island. Cities have their own independent assessment organizations. As is common in New England there is no provision for administrative review, other than by the assessing boards themselves. In the event of unfavorable action by the assessors, complaints must be taken, therefore, directly to the courts. By legislation of 1930, the system of apportionment by expenditure was introduced, and commencing with the year 1931, the basis of the apportionment of the state levy on property has been the proportion of local tax collections rather than the previous basis of assessed valuations.³⁷

STATE SUPERVISION: POTENTIAL.—The Board of State Tax Commissioners, the administrative head of the tax system, is composed of three members, appointed by the Governor with the advice and consent of the Senate for terms of six years. Its powers are limited by statute chiefly to advice and education. It may visit the local assessors in order to inspect their work and methods; and is authorized to confer with, advise and give them such information and request of them such action as will tend to produce uniformity in valuation and assessment throughout the state. It also is directed to prepare forms and blanks for, and may request reports from, the local officials. Whenever the constitutionality or construction of any tax statute or the validity of the assessment of any tax is in question, the court before which such proceedings are pending must notify the State Board, and the latter may appear and be heard on the matter.³⁸ The board does not possess any of the more drastic powers of central control such as the powers of reassessment or removal.

STATE SUPERVISION: ACTUAL.—As one would expect from a reading of the statutory powers, the activities of the State Board of Tax Commissioners of Rhode Island with respect to local assessment are almost entirely of an educational and advisory nature. It holds annual state conferences with the local assessors and gives them general advice and guidance.³⁹ It has also been active in urging the establishment of modern systems of assessment, although its efforts in this direction have apparently not borne much fruit thus far.⁴⁰

RECENT ASSESSMENT CONDITIONS.—In its most recent report, the board commented rather dejectedly on the failure of the localities to provide adequate administration for the task of assessment.

³⁷ P. L. 1930, ch. 1595, effective Jan. 1, 1931.

³⁸ General Laws of Rhode Island, Revision of 1923, secs. 487-490, 492.

³⁹ Data from recent reports of the Board of State Tax Commissioners. The proceedings of the annual conferences are published in the *Bulletins of the Rhode Island Tax Officials' Association*.

"The Board of Tax Commissioners has repeatedly commented in previous reports upon the insufficiency of the means placed at the disposal of the local assessors for effectively performing the duties imposed upon them by law. It has also frequently urged the desirability of undertaking scientific revaluations of property in the several cities and towns. It deems it proper now to urge this as a necessity, if sound and effective measures are to be followed in the effort to improve the condition of municipal finances. Experience everywhere has demonstrated beyond the possibility of successful contradiction that systematic revaluations of taxable property in both large and small jurisdictions invariably result in better assessments and in an increase not only in taxable property but in the tax-paying capacity of the jurisdiction concerned, and not infrequently in a measure of relief to those tax-payers in greatest need of relief by a more equitable distribution of the burden.

"Within the past few years scientific revaluations have been proposed in a few Rhode Island municipalities, and these propositions have received more or less serious consideration, but in most cases where consideration has reached the point of ascertaining the cost of such an undertaking, those in authority have been loathe to appropriate the necessary funds and the project has died a natural death.

The years 1931 and 1932, however, present two outstanding instances of what can be achieved by carrying such an undertaking through to final completion."⁴⁰

Then follows a description of the reappraisals carried on (with the assistance of an expert appraisal company) in the city of Central Falls in 1931 and in the town of Cumberland in 1932, and a eulogy of the results achieved. The systems introduced in these communities are apparently very different from the usual methods followed by the localities of the state:

"A serious handicap to local assessors in the rural districts as well as in some of the more populous centers is the lack of an adequate system of office records. The failure to make provision for installing such a system and for keeping it up to date by necessary revision from year to year is hardly in accord with a far-sighted public policy. This failure results invariably in indifferent assessments and a consequent financial loss to the municipality. Assessors' plats or tax maps in some of these jurisdictions are unknown. Land areas of parcels of property upon which valuations are placed year after year can be only approximated, and instances of parcels of rural property being entirely overlooked are not rare."⁴¹

These comments of the State Board of Tax Commissioners furnish the best available evidence on assessment conditions in Rhode Island. The performance of the function is very unsatisfactory.

⁴⁰ *Fourteenth Report of the Board of Tax Commissioners for the Biennial Period 1931-1932*, pp. 30-31.

⁴¹ *Ibid.*, p. 34.

CHAPTER IV

THE MIDDLE ATLANTIC STATES

New York

ASSESSMENT, REVIEW AND EQUALIZATION.—With certain exceptions, the area of the state outside of the cities is assessed by town assessors, three in each town. They are elected biennially, two for a term of four years, one for a term of two years. Compensation for the work is usually on a per diem basis.¹ Cities have their own assessing organizations, sometimes elective, sometimes appointive in character.² New York City has an appointive department of taxes and assessments headed by a president and six other commissioners. Ordinarily, there is no provision for administrative review other than by the assessors themselves.³ Thus, further appeal

¹ In some of the counties, special legislation has been passed. Thus, in Westchester county, any town may substitute a single appointive assessor (with a deputy and such subordinates as may be necessary) for the tri-membered elective board, and a number of towns in this county have done so. In Nassau county, the members of the board may be appointed or elected and paid limited salaries. In Erie county, they are to be elected, but may be compensated on an annual instead of a per diem basis. Moreover, a general statewide permissive act, passed in 1925 allows any town with over 5,000 inhabitants to replace its board of three elective assessors with a single appointive assessor. There are 111 towns in the state to which this act is applicable. Exclusive of the towns in this number operating under the special county acts mentioned above, only 2 towns had taken advantage of this act in 1932. Data from *Report of the New York State Commission for the Revision of the Tax Laws, 1932*, Memorandum No. 3, pp. 25-27. (This memorandum was prepared under the direction of Mr. Philip H. Cornick of the National Institute of Public Administration.) It is the intent of the law to have the assessed valuation a product of the combined judgment of the three assessors, but the practice of dividing the town into three areas, and each assessor assessing a portion of the entire town alone has become common. See H. M. Powell, *Reducing Realty Taxes*, 1928, pp. 13-14.

² Taxes on village property for town, county and state purposes are levied on the valuations established by the town roll. Assessments for village purposes may be made by village officials, although the portion of the town roll applicable to properties within the village is frequently utilized. *Report of the New York State Commission for the Revision of the Tax Laws, 1932*, Memorandum No. 3, p. 25.

³ A special act authorizes a town board of review composed of three appointive members in Westchester county. Other special acts have been passed applicable to the towns and cities of this county, and in many of them there are boards of review composed either partially or wholly of members who are not assessors. The general state-wide permissive act passed in 1925 authorizes any town of over 5,000 population to create an ex officio board of review composed of the supervisor, the single appointive assessor provided for in this act, and a justice of the peace, but this provision has been very rarely invoked.

In some of the larger cities, such as New York and Buffalo, the boards of commissioners, heading the assessing departments, delegate the work of assessing to subordinates, and hence are somewhat similar to a reviewing board in that they themselves have not made the individual assessments complained of. *Report of the New York Commission for the Revision of the Tax Laws, 1932*, Memorandum No. 3, pp. 29-30.

must be taken to the courts.⁴ A county equalization is made ordinarily by the board of county supervisors or a committee of this board.⁵ A tax district, through specified town, village, and city officials may appeal to the Tax Commission against the county board's equalization. The officials so specified are the mayor for a city; a borough president for a borough; and a supervisor for a town. In the case of a city, a majority of the common council or board of estimate must first consent to and approve of the bringing of the appeal. In the case of a town, consent and approval by a majority of the town board is required. The Tax Commission may also review county equalizations upon its own motion. It makes a state equalization, limited in its scope to county aggregates.⁶

STATE SUPERVISION: POTENTIAL—The State Tax Commission is composed of three members, appointed by the Governor with the advice and consent of the Senate. The term of the president is coterminous with that of the Governor; the other members hold office for terms of six years. The statutory powers and duties of the commission with respect to supervision over assessments include general supervision; the furnishing of assessment blanks and of assessment rolls; and the collection of data on assessments by reports on forms furnished by it. It is also its function to advise, assist and direct the local officials, and to furnish information and instruction to aid them in the performance of their duties. It is authorized to request them to meet in conference with it once in two years. For this purpose, it may invite all local assessors and supervisors to attend one meeting or may arrange for regional meetings in various parts of the State. It is authorized to visit the counties, although not oftener than once in two years (except upon request of the board of supervisors); to investigate the methods of the local officials; and to learn whether they are faithfully discharging their duties. It does not have the power to order reassessments directly. It must apply to a justice of the Supreme Court of the judicial district within which the tax district is situated for an order requiring the assessor to show cause why a reassessment should not

⁴ Although the Tax Commission has no mandatory power with respect to complaints of individual property owners, informal advisory influence has been sometimes exerted, after investigation of complaints made to it by the Bureau of Local Assessments, Land Tax and Equalization *Ibid.*, p. 29.

⁵ Again there are exceptions. For example in Westchester county, the equalization committee of the county board of supervisors employs a full-time appointive staff for the purpose of collecting and analyzing value data. In Erie county, there are two full time commissioners of equalization, appointed by the justices of the Supreme Court residing in Erie county. The general Tax Law permits the county board of supervisors to appoint a county board of equalization composed of three members, two of whom must be residents of the county and the third a member of the judicial district in which the county is situated, but this provision has apparently been rarely invoked. *Ibid.*, pp 33-35.

⁶ Prior to January 1, 1927, the State equalization was made by a board composed of the three members of the Tax Commission, the Lieutenant-Governor, the Speaker of the Assembly, the Secretary of State, the Comptroller, the Treasurer, the Attorney-General and the State Engineer and Surveyor. The change was made by Laws of 1926, ch. 553.

be made. In the event that the decision is awarded to the Tax Commission, the reassessment is to be made by the assessor. The Tax Commission does not have the power to institute proceedings for removal. However, if an assessor or county board of equalization fails to comply with the law, or the rules of the commission, it may issue an order to comply, and if this is not obeyed, may apply to a justice of the Supreme Court of the proper county for an order to comply.⁷

STATE SUPERVISION: ACTUAL.—The work of supervision and equalization of local assessments have been delegated largely to the Bureau of Local Assessments, Land Tax and Equalization. This bureau consists of a director, an assistant director, and a staff, at present, of seven field agents and five engineers. The latter make appraisals of public utility property, manufacturing plants, etc., upon request of local officials. The former advise assessors as to the proper performance of their work, and collect value data for equalization purposes. Up to the time of the depression, conferences with the local assessors had been held biennially by the State Tax Commission. In recent years, the New York State Conference of Mayors and Other Municipal Officials has, in co-operation with the State Tax Commission, held biennial conferences which it characterizes as a training school for assessors. The power of reassessment was exercised in two cases some fifteen or twenty years ago, at which time the decision went in favor of the localities. Since this time, no attempt has been made to order reassessments.⁸

RECENT ASSESSMENT CONDITIONS.—The evidence on assessment inequality in New York consists chiefly of the field investigation type; however there is also some data furnished by ratio test studies.

The Urban Situation: Recent Developments.—Apparently there has been substantial progress made in recent years in the field of urban assessments. In a study made in 1920, the Special Joint Legislative Committee on Taxation and Retrenchment severely criticized the lack in most of the cities of the State at that time of tax maps, unit values, value records and other components of modern assessing methods.⁹ A much better situation was found to exist twelve years later. In 1932, the New York State Commission for the Revision of the Tax Laws reported that all of the three first class cities, five of the ten second class cities, and eleven of the forty-seven third class cities were using modern technical methods; and that the other second class cities and thirteen of the other thirty-six third class cities were making progress in the development of such systems.

⁷ McKinney's Consolidated Laws of New York Annotated, 1928, and Cumulative Supplement, 1934, Book 59, the Tax Law, secs. 170, 171, 171d, 173, 173a, 173b.

⁸ Data from interviews with Mr. Daniel R. Spratt, Director, and Mr. Harold R. Enslow, Assistant Director, Bureau of Local Assessments, Land Tax and Equalization, March 11, 1935. The most recent session of the "school" was held March 12-14, 1934.

⁹ Report of the Special Joint Legislative Committee on Taxation and Retrenchment, 1920, Legislative Document 80 (1920), chap. x.

The poorest showing was made by the smallest of the cities of the third class. Of the twenty-three smallest cities of the State, only two had adequate assessing systems in 1932.¹⁰

Regressivity.—Because of improvements introduced in recent years in the cities of New York, conclusions based on a comparison of sales data and assessed valuations as of 1925 may not be quite applicable to present conditions. However, the study is admissible evidence. In 1925, the Tax Commission made a classification, by value of the property, of the sales records which it had compiled for purposes of equalization from 1915 to 1925. These records, 166,000 in number, were segregated according to whether the properties were located in cities, incorporated villages and areas outside of cities and incorporated villages. New York, Westchester, Erie and Hamilton counties were not included in this compilation. The results for the cities were as shown in Table VIII.

TABLE VIII

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN CITIES OF NEW YORK, 1915-1925 ^a

VALUE OF PROPERTY	Number of properties	Average assessment ratio
\$0- \$1,000.....	834	92.7
1,001- 2,000.....	5,537	78.0
2,001- 3,000.....	10,825	70.4
3,001- 4,000.....	11,116	67.0
4,001- 5,000.....	9,828	65.2
5,001- 6,000.....	7,660	63.5
6,001- 7,000.....	6,476	62.5
7,001- 8,000.....	4,809	61.7
8,001- 9,000.....	3,332	62.1
9,001- 10,000.....	2,414	61.6
10,000- 11,000.....	1,465	61.7
11,001- 12,000.....	1,213	63.0
12,001- 13,000.....	925	60.9
13,001- 14,000.....	684	60.3
14,001- 15,000.....	699	62.6
15,001- 20,000.....	1,673	63.8
20,001- 25,000.....	758	64.0
25,001- 30,000.....	474	62.1
30,001- 40,000.....	529	64.1
40,001- 50,000.....	267	61.5
50,001- 60,000.....	137	62.4
60,001- 70,000.....	90	63.0
70,001- 80,000.....	67	55.1
80,001- 90,000.....	30	61.7
90,001-100,000.....	42	66.8
Over 100,000.....	156	58.4
Total and average.....	71,840	63.6

^a Source: Report of the State Tax Commission, 1925, p. 449.

¹⁰ Report of the New York State Commission for the Revision of the Tax Laws, Memorandum No. 3, pp. 23-24. First class cities are those of 175,000 or more population; second class, of 50,000 to 175,000; third class, all other cities. Constitution, Art. 12, sec. 2.

Superficial examination of this table might lead one to the conclusion that although there is a tendency for the least valuable properties to be overassessed relatively to the more valuable properties, this tendency toward regressivity is limited only to the few value classes below \$5,000. It is more likely, however, that the limited extent of regressivity shown in the table probably underrepresents the actual extent of this evil, due to the grouping of all cities in one value class. This would not necessarily result in distortion of representation if all of the cities assessed property at the same average ratio. But such is not the case. In general, the best assessments, and in general, the most vigorous attempts at full value assessments, are made in the larger cities of the State. This, associated with the further fact that the vast majority of the more valuable properties are found in these larger cities, leads one to the conclusion that actual regressivity has been cancelled out by the grouping made. For had there been no regressivity, the combination of the factors described above would have resulted in *higher* assessment ratios for the more valuable properties, whereas no such trend is represented by the table.

Further evidence on the nature and extent of regressivity has been developed in a ratio study made by the Special Joint Committee on Taxation and Retrenchment which reported in 1923. In one part of this study, assessments in a city utilizing technical assessment methods were compared with assessments in a city and eight towns without such methods. For the test of the first city, 301 affidavits on actual sales prices were secured; for the other city and eight towns, 709 affidavits. The results of a classification of the data by value classes were as shown in Table IX.

TABLE IX

RELATIONSHIP OF REGRESSIVITY TO EXISTENCE OF TECHNICAL
ASSESSING SYSTEMS IN NEW YORK ^a

VALUE OF PROPERTY	CITY WITH TECHNICAL SYSTEM	CITY AND 8 TOWNS WITHOUT TECHNICAL SYSTEM
	Average assessment ratio	Average assessment ratio
\$0-\$4,999	67 8	63.0
5,000- 9,999	64 0	61 5
10,000-19,999	60 0	59 0
20,000-29,999	69 5	40 0
30,000-39,999	69 0	57 0
40,000-49,999	68 0	48 0
Over 50,000	66 7	29 5

^a Source: *Report of the Special Joint Committee on Taxation and Retrenchment, 1923, Leg. Doc't.* (1923), No. 55, p. 110.

A positive correlation between technical assessing and absence of regressivity was revealed by this study. Where modern assessing systems have not been installed or are not maintained, namely, in the majority of the smaller cities, the tax is regressive in operation, contrary to the law, and contrary to the interests of the mass of taxpayers.

New York City.—With respect to assessment inequality as amongst individual properties in the cities of New York, the writer himself made a ratio test based on sales values several years ago for New York City. This study was included in a Master's Thesis presented to Columbia University, which, with certain modifications was published in the *Real Estate Record and Builders' Guide*.¹¹

The year 1926 was chosen for the test because of the relatively "normal" situation existing at that time. Every effort was made to exclude unrepresentative sales by discarding such transfers as foreclosures, executor and trustee sales, and sales between members of the same family. Of all the sales occurring in Manhattan in the first three months of 1926, 1,749 were considered usable. The sales values were computed on the basis of the amount of the federal transfer tax stamps plus mortgaged value.¹² The assessment ratio of each individual property was then computed, and the ratios classified. The results were as shown in Table X.

The coefficient of dispersion was 20.75 per cent.¹³ This figure indicated substantial inequality in assessment administration in New York City.¹⁴

Summary of the Evidence on the Urban Situation.—On the basis of the available evidence, it would appear that, since modern assessing methods have not yet been widely adopted by the smaller cities of the state, inequality and regressivity are probably very prevalent. As for the more densely populated urban centers, technical systems have been usually installed, but a ratio test of assessments in New York City, which has the reputation of being one of the

¹¹ J. D. Silverherz, "A Brief History of Real Estate Assessment in New York City," *Real Estate Record and Builders' Guide*, July 18, 1931, and in the following issue, July 25, 1931, "A Consideration of Assessment Methods in New York City." The ratio test referred to is described in detail at pp. 5 and 6 of the latter issue.

¹² The data were obtained from the *Real Estate Record and Guide Quarterly*, in which conveyance records of Manhattan published by the *Real Estate Record and Builders' Guide* each week are compiled.

¹³ The coefficient computed in the original investigation was based on the standard deviation, and was found to be 25.94 per cent. The average assessment ratio was 71.7 per cent.

¹⁴ In addition to variations as amongst assessment ratios of individual properties, considerable inequality as amongst the average ratios in the tax sections of Manhattan and as amongst types of buildings was found in this investigation. With respect to the latter, vacant lots were found to be assessed at an average of 64.8 per cent; one and two family dwellings, at 67.0 per cent; apartments and flats with stores, at 71.4 per cent; apartments and flats without stores, at 75.6 per cent; store buildings, at 76.2 per cent; and office buildings at 80.9 per cent.

better assessed cities of the State, indicates substantial room for improvement in the larger cities.

TABLE X

DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN NEW YORK CITY,
1926

ASSESSMENT RATIO	Number of prop- erties
Less than 35.....	24
35- 39 9.....	26
40- 44 9.....	60
45- 49 9.....	79
50- 54 9.....	115
55- 59 9.....	146
60- 64 9.....	162
65- 69 9.....	194
70- 74 9.....	192
75- 79 9.....	194
80- 84 9.....	157
85- 89 9.....	129
90- 94 9.....	104
95- 99 9.....	47
100-104 9.....	43
105-109 9.....	27
110-114 9.....	17
115-119 9.....	12
120 and over.....	21
Total.....	1,749

The Rural Situation: The Report of the Special Joint Committee on Taxation and Retrenchment, 1923.—The situation in the rural areas is apparently a good deal worse than in the cities. In 1923, the Special Joint Committee on Taxation and Retrenchment, after a comprehensive field investigation of assessment practices, reported assessment rolls in poor condition, widespread copying of former rolls, absence of tax maps, and other evils.

“In one town the following figures show the aggregate assessed values of real estate from 1917 down to date:

1917	\$393,565
1918	391,265
1919	392,035
1920	393,365
1921	393,354

“In 1921 the State Tax Commission estimated the rate of assessed to true value for this town to be 84 per cent on the basis of 1920

assessments. The ratio established by the commission in 1922 on the basis of the 1921 assessment is 71 per cent. Evidently former tax rolls have more weight with the assessors than do the sales of real estate and other evidence of increasing value used by the State Tax Commission in fixing its equalization rates for special franchises. The 1921 assessment has decreased from that for 1917 by \$211. On the other hand, the spread between assessed value and estimated true value, which amounted to \$75,000 in 1920, had increased to \$160,000 in 1921. Similar proof that many assessors interpret their oath regarding full value assessments to mean that they have faithfully copied the preceding year's roll may be adduced from almost any county in the State.

"In another county a case was found of a property sold in 1899 which was assessed to both vendor and vendee from 1899 to 1921. If the assessors had not been guilty of a slavish copying of the rolls from year to year, a duplicate assessment of this kind could hardly have remained undiscovered for twenty-one years.

"In still another county a lot improved with a summer cottage renting for \$200 a season is carried on the rolls at a value of \$150, including improvements.

"In another county a lot containing a tumble-down shack in 1914 was assessed at \$600. Since that time the property has been improved with a cottage and other buildings costing not less than \$2,500. In spite of the fact that the assessors have 'viewed' the property annually, the assessed value of \$600 still stands.

"In one matter, however, many of the assessors have varied from their plan of carefully copying the preceding year's roll. That is in the matter of the description of the taxable property. In some towns there has been a progressive deterioration of their descriptions which has reached a point where the courts have set aside in some instances the taxes levied because the descriptions are not 'sufficient to identify the land intended to be assessed.' In towns where there are no tax maps—and outside of Westchester county where tax maps are mandatory only a negligible number of towns have such maps—this is an extremely serious matter as the tax rolls comprise the only comprehensive source of information regarding the dimensions and location of taxable property."¹⁵

The regressivity revealed by the ratio test of assessments in the eight towns and city without technical methods has already been shown in Table IX.¹⁶ On the basis of the figures of this table, the committee declared, "The conclusion is inescapable that where no system of assessment is followed—and that condition exists in practically all the 932 towns in the State—there is a general tendency to assess small properties at a higher percentage of full value than larger properties."¹⁷

The Report of the New York State Commission for the Revision of the Tax Laws, 1932.—In 1932, the New York State Commission

¹⁵ *Report of the Special Joint Committee on Taxation and Retrenchment, 1923, Leg. Doc't (1923), No. 55, pp. 107-108.*

¹⁶ *Supra*, p. 48.

¹⁷ *Ibid.*, p. 107.

for the Revision of the Tax Laws found assessment conditions to be still very poor in the towns of the State. After commenting on exceptional cases (largely of towns which are not really rural areas but rather suburbs of New York City, Buffalo and Rochester, such as Harrison, Scarsdale, Rye and Pelham in Westchester County; Aurora, Collins, East Hamburg, Eden, Alden and Lancaster in Erie County, and Irondequoit and Brighton in Monroe County), the report states:

"Diligent search would no doubt reveal towns in the State, other than those mentioned, in which some degree of progress has been made toward the essentials of good assessment. A small number, for example, are known to have availed themselves of the provisions of section 30 of the Tax Law which authorizes any tax district in the State to prepare a tax map. Some of those maps, however, have already fallen into disuse. Since the assessors in the smaller towns have no office facilities and must, therefore, keep the records at their homes, and since there is a considerable turnover among assessors at the biennial election, some of the maps are reported to have become misplaced. In other cases the maps are reported to have fallen into disuse, because no one connected with the town government was qualified to keep the maps abreast of current changes. After due allowance for these factors, it is doubtful whether thirty towns could be found in the State where the assessment methods have changed in any important particular since the State adopted its first Constitution.

"A random sampling of rural towns in a number of counties visited during the current year indicates that those towns, with few exceptions, are working without maps, without building records and without any plan of comparative valuation. The last completed roll provides the sole basis for the current roll. In a number of cases the differences between the current roll and the preceding one consist chiefly of errors in copying, and of changes due to transfers of properties. Furthermore, there is clear evidence that all changes in ownership are not being properly recorded on the rolls. In a few instances, where the aggregates of the assessed valuations had been substantially increased, it was found that the increase had been achieved by adding a flat percentage to all of the individual items on the roll for the previous year. Such a procedure does not and cannot provide an equitable basis for the levy of taxes. One has only to look at the quality of the handwriting on some of the rolls, and the obvious errors which have crept into lengthy descriptions by metes and bounds, to realize that the repeated copyings, without reference to basic maps and records, must tend to make each successive roll less accurate than its predecessors."¹⁸

The Study of Regressivity Made by the State Tax Commission in 1925.—Further evidence on regressivity is furnished by the Tax Commission's study of 1925, to which reference has already been made. The assessment ratios of the properties of this study located

¹⁸ *Report of the New York State Commission for the Revision of the Tax Laws, 1932, Memorandum No. 3, p. 27.*

in towns and villages were classified according to value, with results as shown in Table XI.¹⁹

TABLE XI

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN TOWNS
AND VILLAGES OF NEW YORK, 1915-1925 ^a

VALUE OF PROPERTY	INCORPORATED VILLAGES		OUTSIDE OF CITIES AND INCORPORATED VILLAGES	
	Number of properties	Average assessment ratio	Number of properties	Average assessment ratio
\$0- \$1,000	2,011	78.0	6,385	66.9
1,001- 2,000	7,511	65.3	13,378	57.0
2,001- 3,000	7,766	59.7	11,155	52.9
3,001- 4,000	5,596	56.9	7,995	51.1
4,001- 5,000	3,544	54.0	5,820	49.7
5,001- 6,000	1,946	51.3	4,039	49.3
6,001- 7,000	1,190	50.1	2,798	48.2
7,001- 8,000	875	46.4	2,258	48.5
8,001- 9,000	521	42.5	1,374	47.7
9,001- 10,000	426	46.7	1,364	47.9
10,001- 11,000	215	42.3	750	47.4
11,001- 12,000	238	44.8	750	47.1
12,001- 13,000	176	43.4	497	48.4
13,001- 14,000	103	39.0	362	46.4
14,001- 15,000	152	41.3	471	47.5
15,001- 20,000	334	44.4	940	45.6
20,001- 25,000	154	41.9	334	42.4
25,001- 30,000	110	37.7	195	38.0
30,001- 40,000	103	35.7	155	42.0
40,001- 50,000	55	43.7	72	39.4
50,001- 60,000	20	40.6	28	39.2
60,001- 70,000	13	45.6	18	43.2
70,001- 80,000	8	42.3	11	46.7
80,001- 90,000	4	29.6	7	33.6
90,001-100,000	7	27.8	12	46.9
Over 100,000	21	38.5	22	41.7
Totals and averages	33,099	51.6	61,196	49.1

^a Source: *Annual Report of the State Tax Commission, 1925, p. 450.*

¹⁹ Villages are more densely populated portions of towns. When an area in a town has become urban in character and when the people desire municipal functions that cannot be adequately provided by the town government they incorporate as a village. After incorporation they remain parts of the towns and counties in which they are located, and their residents are taxed for town and county purposes also. They are really urban centers in rural areas and hence could be classified as either urban or rural. Most investigators have considered them as part of the urban assessing problem, but due to the fact that the cities as a group in New York have developed technical methods, to some extent at least, and that the towns, including the villages, have not, it appeared to the writer that with respect to assessment it would be better to consider villages as part of the rural problem.

This table reveals a pronounced and persistent, although somewhat irregular tendency for the less valuable properties to be assessed at higher ratios than the more valuable properties. Unlike the situation in cities, the largest towns and villages are not assessed at markedly higher average ratios. Hence the grouping of properties of all villages and of all towns in one value class does not result in the type of distortion which the aggregative grouping causes in the case of the cities. This, together with the fact that the cities have advanced further in the development and adoption of technical methods of assessing, accounts for the comparatively worse showing of regressivity in the rural table.

Summary.—On the basis of the available evidence on assessment inequality in New York, we may conclude that progress has been made in the larger cities of the State in recent years, although there is room for substantial improvement; that the situation in the smaller cities is still very unsatisfactory, with regressivity probably prevalent; and that the rural areas are very badly assessed, with inequality and regressivity very pronounced.

New Jersey

ASSESSMENT, REVIEW AND EQUALIZATION.—The municipality is the assessment unit in New Jersey. There is a wide variety of types of organization. In some municipalities there are boards of assessors, in others, a single assessor; again, in some of the localities, the assessors are appointed by the mayor or council, in others, they are elected by popular vote. Their terms of office also vary throughout the state. In each county, there is a county board of taxation composed of three members, compensated on a full-time salary basis, who are appointed by the Governor with the advice and consent of the Senate for three year terms. These boards not only hear and decide complaints from taxpayers and equalize on their own motion, but also have general supervisory powers over the local assessors, and (subject to the approval of the State Tax Department) are authorized to issue rules and regulations to govern them.

The chief administrative officer of the tax system is the State Tax Commissioner, who is at the head of the State Tax Department. He is appointed by the Governor for a five year term. The present Tax Department was established in 1931, having succeeded to most of the powers of the former State Board of Taxes and Assessments, the latter continuing in existence with appellate functions, under the name of the State Board of Tax Appeals.²⁰ The State Board

²⁰The former State Board of Taxes and Assessments was an appointive board of five members. When the Tax Department was established by Laws of 1931, ch. 330, it was provided that the employees of the State Board of Taxes and Assessments be retained in the new department (except for the proviso that the Tax Commissioner be allowed to exercise his discretion as to abolition of officers or positions). By P. L. 1931, ch. 100, sec. 2, it was provided that the first members of the new State Board of Tax Appeals be the members of the former State Board of Taxes and Assessments, and their terms were varied from one to five years.

of Tax Appeals is authorized to hear appeals brought by individuals and municipalities against the decisions of the county boards of taxation, and those brought by counties against the state equalization. The latter is made under the direction of the State Tax Commissioner, and is confined by law to adjustments as amongst county aggregates.

STATE SUPERVISION: POTENTIAL.—The State Tax Commissioner has general supervisory power over the local assessing officials and the county boards, and is authorized to prepare forms for and require reports from them. It is his duty to investigate the methods used by assessors in the state and to give them information which will aid them in their work. Every fifth year (dating from 1923) he is required to make an investigation of the assessments in each county. He is authorized to order reassessments wherever and whenever deemed necessary, and, if the local assessors fail or refuse to comply with the reassessment order, to appoint some other person to make the reassessment under the direction of the department. He does not have the power of direct administrative removal, but he may file charges with the Supreme Court for the removal of assessors who wilfully or unintentionally fail, neglect or refuse to comply with the constitution and laws of the state.²¹

STATE SUPERVISION: ACTUAL.—State supervision and control over assessment in New Jersey is not very extensive. No really effective state equalization has ever been made or even attempted. No effort has been made for years to exercise the power of reassessment, and the power to apply to the Supreme Court for removal of assessors has very rarely been invoked.²² Supervision has been entrusted largely to the county boards of taxation. At the present time there is no field staff, no appropriation having been granted for this purpose during the past few years by the legislature.²³ It appears that the state participates in assessments mainly through advisory assistance by the Tax Commissioner upon request of the local assessors, and in the hearing of appeals by the State Board of Tax Appeals.

RECENT ASSESSMENT CONDITIONS.—*Urban*.—In the recent survey made by the Commission to Investigate the County and Municipal Taxation and Expenditures, of which Dr. Harley L. Lutz was Director of Research, a comparative ratio test of assessment inequality was made.²⁴ Some 805 expert appraisals of properties located

²¹ Compiled Statutes of New Jersey, 1709-1910, Taxes and Assessments, secs. 37 a-h; Supplement, 1911-1924, Taxes and Assessments, secs. 208-37f, P. L. 1931, chs. 100 and 336.

²² Letter from Mr. J. H. Thayer Martin, State Tax Commissioner of New Jersey, under date of June 19, 1934.

²³ Letter from Mr. Frank A. O'Connor, Field Secretary of the State Tax Department of New Jersey, under date of Sept. 10, 1934.

²⁴ Commission to Investigate the County and Municipal Taxation and Expenditures, *Report Number 6*, "The Revenue System of New Jersey," 1931, p. 98-111.

in ten different counties, and 457 from eight municipalities of the state, all obtained from an insurance company, were compared with their corresponding assessed valuations. The results of a classification of the ratios for the 805 properties were as shown in Table XII.

TABLE XII

DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS OF URBAN PROPERTY
IN NEW JERSEY, LAND AND BUILDINGS ^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES	
	Land	Buildings
0- 20	140	14
20- 40.	378	265
40- 60.	167	307
60- 80.	100	154
80-100.	11	38
Over 100.	9	27
Totals	805	805

^a Source: Commission to Investigate the County and Municipal Taxation and Expenditures, *Report Number 6*, "The Revenue System of New Jersey," p. 106.

Of the two, the land portion of the total value of the property was the more badly assessed on the average. The average ratio of the assessed to the appraised value of the land was 37.4 per cent, with a coefficient of dispersion of 43.9 per cent. The situation with respect to the building value portion of the total was better than this extremely high degree of inequality, but it also was very inequitable. For the buildings, the average ratio of assessed to appraised value was 55.5 per cent, the coefficient of dispersion 30.4 per cent.²⁵

Rural.—For the purpose of ascertaining the extent of assessment inequality with respect to rural property, appraisals of 406 farms, obtained from an undivulged source, were analyzed. The data were classified so as to show average county ratios, with the results as shown in Table XIII.

²⁵ Computed by the writer on the basis of Table XII. Martin and Stephenson have computed the coefficient of dispersion for the land values of the 457 properties in the eight municipalities. It was 40.75 per cent. Martin and Stephenson, *loc. cit.*

TABLE XIII

AVERAGE ASSESSMENT RATIOS OF RURAL PROPERTIES IN SAMPLE NEW JERSEY COUNTIES ^a

COUNTY	Average assessment ratio	COUNTY	Average assessment ratio
Atlantic	26	Middlesex	45
Burlington	44	Monmouth	51
Camden	50	Morris	30
Cape May	31	Ocean	27
Cumberland	45	Salem	39
Gloucester	48	Somerset	46
Hunterdon	47	Sussex	40
Mercer	54	Warren	53

^a Commission to Investigate the County and Municipal Taxation and Expenditures, *Report Number 6*, p. 107.

Wide variations were found to exist as amongst the average assessment ratios of these sixteen counties. The extremes were Atlantic county with an average ratio of 26 per cent and Mercer county with an average ratio of 54 per cent. Moreover, there were many outstanding examples of inequality within the counties as amongst individual properties.

"For example, one farm in Burlington county was appraised at \$35,000 and assessed at \$8,900, or 25 per cent, another farm in this county was appraised at \$8,500 and assessed at \$6,400, or 75 per cent. In Gloucester county, two properties in one district had a combined value of \$20,009 and a combined assessment of \$6,000, or 30 per cent, while a farm in another district, appraised at \$15,000 was assessed at \$11,000, or 73 per cent. In Monmouth county, one property was appraised at \$16,000 and assessed at \$3,000, or 19 per cent, while another was appraised at \$15,000 and assessed at \$9,500, or 63 per cent."²⁶

Summary.—The assessment situation in New Jersey is summarized in this report as follows:

"All property legally subject to taxation is not now being taxed, since some real property and much personal property are not being listed. Property is not now being assessed at its true value, nor any uniform percentage of true value. Instead, wide variations are found in different districts and in the assessment of different holdings in the same district. These conditions reflect in part the inherent difficulties of *ad valorem* taxation; but they are to be ascribed, in even greater degree, to the fact that assessments are now made by independent assessing officers in a large number of small local districts. Many of these districts are too small to pro-

²⁶ *Ibid.*, p. 107.

vide competent assessors with adequate training and equipment. In no respect can the supervision and equalization of assessments by county and state authorities be regarded as adequate."²⁷

Pennsylvania

ASSESSMENT, REVIEW AND EQUALIZATION.—There is a wide variety of types of assessment organization in this state. Most commonly a single town assessor, elected by popular vote, triennially assesses the real property in the rural areas. In the more populous counties, provision is made for special boards. In Philadelphia, assessors are appointed by the board of revision; in second class cities (Pittsburg and Scranton), a board of assessors of five members is elected; in third class cities, the city council appoints a single assessor. Review and revision are generally made by the county commissioners. First and second class cities have special boards of revision, while in third class cities, the council constitutes such a board. Assessments are reviewed and equalized for purposes of the county tax by the county commissioners. There is no state levy on real property and no state equalization.

STATE SUPERVISION.—There is practically no statutory provision for state supervision and control over local assessments in this state. No state tax on real property has been levied for many years, and this policy of separation of the sources of state and local revenue has resulted in almost absolute local autonomy with respect to assessment administration.

RECENT ASSESSMENT CONDITIONS.—The best evidence on assessment conditions in Pennsylvania is furnished by two studies of assessment inequality made by Prof. F. P. Weaver, one published in 1926, the second in 1931.²⁸ The ratio test method was utilized in both studies:

The Weaver Study of 1926.—In the 1926 study, sales values were used as a basis for the test, the sales being as of the three years preceding the summer of 1925 (when the data were compiled). Six counties were selected as representative of the various types of the economic geography of the state: Lebanon and Lancaster, of the premier farming region of the southeast; Westmoreland, of the bituminous coal mining and industrial section of the southwest; Crawford, of the northwestern farming area; Wyoming, of the northeastern dairy section; Warren, of the oil and gas regions. When the ratios were computed and classified, the results were as shown in Table XIV.

²⁷ *Ibid.*, p. 108.

²⁸ F. P. Weaver, "Rural Taxation in Pennsylvania," being Part I of *Some Phases of Taxation in Pennsylvania*, Pennsylvania Department of Agriculture General Bulletin 437, Vol. 9, No. 24, December 15, 1926, pp. 1-25; F. P. Weaver, *The Rural Tax Problem in Pennsylvania*, Pennsylvania State College Bulletin 263, March 1931, pp. 18-23.

TABLE XIV

RANGES AND AVERAGES OF ASSESSMENT RATIOS IN SAMPLE COUNTIES
IN PENNSYLVANIA, 1923-1925 ^a

COUNTY	URBAN			RURAL		
	Range	Average assessment ratio	Number of properties	Range	Average assessment ratio	Number of properties
Crawford	73-19	35	99	156-13	46	227
Lancaster	100- 5	28	..	105-27	55	32
Lebanon	133- 9	71	110	132-44	85	43
Warren	89-10	42	120	180-13	47	113
Westmoreland ..	133-10	32	168	129- 9	37	350
Wyoming	100- 8	36	91	82- 8	20	107

^a Source: F. P. Weaver, *Rural Taxation in Pennsylvania*, Part I of *Some Phases of Taxation in Pennsylvania*, Pennsylvania Department of Agriculture General Bulletin 437, December 15, 1926, pp 11-25

Because of the absence of a state levy on real property in Pennsylvania, the wide variations in the average assessment ratios of the six counties is not of significance, although the variety and common lowness of the ratio is indicative of a poor quality of assessment as concerns uniformity of the county and local levies. This lack of uniformity is established by the wide spreads between the assessment ratios of individual properties in all of the counties as indicated in Table XIV under the column "Range." The exact amount of inequality is more definitely revealed by a more detailed classification of the data of three of the counties as shown in Table XV.

On the basis of these figures, Martin and Stephenson have computed the coefficients of dispersion. They indicate a very inequit-

TABLE XV

DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS IN PENNSYLVANIA,
1923-1925 ^a

ASSESSMENT RATIO	WESTMORELAND		CRAWFORD		WYOMING	
	Rural	Urban	Rural	Urban	Rural	Urban
Under 25	31	38	18	10	28	11
25-39	118	88	51	62	44	33
40-59	107	28	91	24	25	36
60-79	56	5	42	3	9	7
80-89	17	2	9	..	1	1
90-100	16	5	9	..	..	3
Over 100	5	2	7	..	..	..
Totals	350	188	227	99	107	91

^a Weaver, *op. cit.*, pp. 17, 20, 23.

able situation in Pennsylvania. They were Crawford, urban 24.90 per cent, rural 31.59 per cent; Westmoreland, urban 37.89 per cent, rural 35.50 per cent; Wyoming, urban 34.16 per cent, rural 39.51 per cent.²⁹

The Weaver Study of 1931.—In the summer of 1930, data on fifteen counties were secured through the co-operation of tax committees appointed by the local granges. Each committee was asked to list the properties in its grange district which had been sold in recent years, together with the prices received and the figures at which they were assessed. They were also requested to list the other farms in the district, place an estimate on their selling value, and list the corresponding assessment. When the assessment ratios were computed and classified, the results were as shown in Table XVI.

TABLE XVI

RANGES AND AVERAGES OF ASSESSMENT RATIOS IN SAMPLE COUNTIES IN PENNSYLVANIA, 1930^a

COUNTY	SALES VALUE BASIS OF COMPARISON				ESTIMATED VALUE BASIS OF COMPARISON			
	Number of properties	ASSESSMENT RATIO			ASSESSMENT RATIO			Number of properties
		Highest	Lowest	Average	Average	Lowest	Highest	
Beaver	29	118	15	79	53	22	142	30
Bucks	26	76	16	48	48	16	100	58
Carbon	17	261	23	53	57	28	99	14
Centre	44	100	17	46	44	9	180	83
Chester	15	43	12	22	34	20	100	14
Crawford	19	150	40	59	75	50	140	23
Cumberland	41	120	38	65	71	36	123	59
Indiana	48	212	22	66	74	20	286	45
Jefferson	71	220	25	65	81	25	220	88
Juniata	97	150	20	49	59	20	150	55
Lehigh	11	73	28	56				
Somerset	103	102	17	46	55	25	171	155
Susquehanna ..	64	179	17	74	83	43	250	48
Warren	12	116	31	36				
Washington	34	160	13	74	80	19	163	68

^a Source F. P. Weaver, *The Rural Tax Problem in Pennsylvania*, Pennsylvania State College Bulletin 262, March 1931, p. 21

In general, there is a fairly close similarity between the results on either of the two bases, the ratios based on sales values being somewhat higher than those based on estimated values in most cases. Thus, in nine of the thirteen counties for which ratios on both bases were computed, the ratio between the assessed value and estimated value was lower than the ratio between assessed value and sales value. On either basis, the existence of wide ranges within each of the counties, and marked inequality, therefore, in the distribu-

²⁹ J. W. Martin and C. M. Stephenson, "Aspects of the Movement toward Separation of Sources of State and Local Revenues," *The Tax Magazine*, Feb. 1933, pp. 80-81.

tion of the tax burden, was clearly demonstrated. In Indiana county, the estimate ratio ranged from 20 per cent to 286 per cent, the sales ratio ranging from 22 to 212 per cent. In Jefferson county, the range was from 25 to 220 per cent on either basis. Most of the other counties did not show such extreme spreads, but very considerable inequality was found even where these ranges were narrowest.

Summary—In 1926, Prof. Weaver arrived at the following conclusions: "The analysis of the six counties studied, if they may be considered to be a fair sample of the state, should force one to the conclusion that the present system of making assessments has failed utterly in accomplishing the purpose for which it was set up. Not only is it impossible to secure assessments at the full value which the law requires but it also appears impossible to get assessments made at any uniform rate either throughout a township, town or county.

"Weaknesses of the present system seem to come largely from incompetence on the part of assessors to raise the rate of assessment in their own districts in order to avoid raising their districts' share of the county tax, the inability to get concerted action throughout a county in this respect, influence on the part of owners of large properties in keeping their assessments below the average of others, and the influence of property owners in general over the action of local assessors with whom they live as neighbors."³⁰

Discussing the data developed in 1930, Prof. Weaver stated: "They indicate that the conditions revealed by the assessment study of 1925 are quite general throughout the state and that little progress has been made in the last five years in securing a more equitable ratio of assessment to selling value."³¹

³⁰ F. P. Weaver, *Rural Taxation in Pennsylvania*, p. 8.

³¹ F. P. Weaver, *The Rural Tax Problem in Pennsylvania*, p. 20.

CHAPTER V

THE SOUTH ATLANTIC STATES

Delaware

ASSESSMENT, REVIEW AND EQUALIZATION.—There are only three counties in this state, namely, New Castle, Kent and Sussex. The assessment organization and procedure in each is essentially similar, such differences as exist being of a minor nature. In each county, there is an appointive full-time board, which both makes the original assessments and also reviews complaints. In New Castle county, the board is composed of four members appointed for terms of four years; in Kent county, of three members appointed for terms of four years; and in Sussex, of three members, for terms of six years. The appointments are made in all three counties by the Levy Court Commissioners (the governing body of Delaware counties).¹

The city of Wilmington has its own board of assessors. Real property is assessed annually in New Castle, quadrennially in Kent, and sexennially in Sussex. There is no provision for state equalization.

STATE SUPERVISION.—As in Pennsylvania, no statutory authority is granted to the State Tax Department to control or supervise the local assessments. And in point of fact, practically no control is exercised.²

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality.*—One of the more elaborate studies of assessments is that of Prof. M. M. Daugherty's investigation of assessment inequality in Delaware, published in 1928.³ Whenever a property is transferred in Delaware, the county official in whose office the transfer is recorded must make a copy of the conveyance, giving a description of the parcel and its sale price, and send it to the Board of Assessment to be filed there. Prof. Daugherty utilized these sales records in his investigation. Four different years were selected: 1921, 1924, 1926 and 1927. The average assessment ratio and coefficient of

¹ Prior to 1915 in Sussex, 1917 in New Castle, and 1921 in Kent, there were elective district assessors in Delaware instead of the present appointive county boards. The changes were made by Laws of 1915, ch. 79 for Sussex; Laws of 1917, ch. 72 for New Castle; and Laws of 1921, ch. 14 for Kent.

² For many years prior to 1921, no state property tax at all had been levied in Delaware. A concomitant of this absence of a state levy was the development of a tradition of absence of state supervision and control over local assessments. In 1921, the school system was shifted largely to the state, and a state property tax came to be levied on the county assessments for school purposes. In the past few years, this state property tax has not been levied.

Regardless of these various changes, Delaware has consistently refrained from interfering with the autonomy of the county tax administration.

³ M. M. Daugherty, *The Assessment and Equalization of Real Property in Delaware*, Delaware Agricultural Experiment Station Bulletin 159, December 1928.

dispersion were computed for each of the four years in all three counties. Rural and urban properties were segregated, and the city of Wilmington was given separate consideration. The results were as shown in Tables XVII and XVIII.

TABLE XVII

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION IN
DELAWARE, BY COUNTIES, 1921, 1924, 1926, AND 1927^a

YEAR	Type of property	Number of properties	Average assessment ratio	Coefficient of dispersion
<i>New Castle</i>				
1921.....	Wilmington....	817	77 6	25.1
	Town	182	73 5	23 3
	Farm	110	83 6	27 1
1924	Wilmington	1,485	64 9	21 7
	Town.	303	69.3	29 1
	Farm.....	86	79.1	29 7
1926	Wilmington ..	1,302	65 4	20 9
	Town ..	377	70 5	30.1
	Farm	96	75 5	41.1
1927	Wilmington ..	1,069	66 1	21.4
	Town ..	300	71 5	31 5
	Farm ..	77	78 6	34 2
<i>Kent</i>				
1921	Town.	146	88.1	30 6
	Farm	138	80 4	31 5
1924.	Town	202	73 7	30.6
	Farm	122	92 5	32 1
1926	Town.	140	79 0	31.4
	Farm..	125	88 0	31.5
1927	Town	130	81 8	27 9
	Farm.....	117	90.9	29.1
<i>Sussex</i>				
1921.....	Town.	217	79 7	34 8
	Farm.	265	82 6	33 9
1924.....	Town	188	77 2	29 6
	Farm.	178	97 5	34 6
1926.....	Town	202	76 4	38 8
	Farm.	175	103 6	29.3
1927.....	Town.....	128	74.3	35.7
	Farm	166	96 8	32.6

^a Sources. M. M. Daugherty, *The Assessment and Equalization of Real Property in Delaware*, Delaware Agricultural Experiment Station Bulletin 159, Dec. 1923, Tables I-IV, pp. 9, 13, 15, and Table XI, p. 27.

TABLE XVIII

AVERAGE COEFFICIENTS OF DISPERSION IN DELAWARE: WILMINGTON,
ALL TOWN, AND ALL FARM ^a

TYPE OF PROPERTY	COEFFICIENT OF DISPERSION				
	Average for the four years	1927	1926	1924	1921
Wilmington.....	22.3	21.4	20.9	21.7	25.1
All Town	31.1	31.7	33.4	30.0	29.6
All Farm	32.2	32.0	34.0	32.1	30.8

^a Based on Table XVII. Unweighted arithmetic averages.

The coefficient of dispersion was consistently much smaller in Wilmington than in the rest of the state, indicating less unsatisfactory assessments there than elsewhere. For Wilmington, the average for the four years considered was 22.3 per cent, as compared with 31.1 per cent for other urban property, and 32.2 per cent for farm property. Single year comparisons show a similar relationship, the contrast being most marked in 1926, with a coefficient of 20.9 per cent in Wilmington compared with 33.4 per cent for other urban property and 34.0 per cent for rural property.

The differences in the uniformity of the assessment in the various counties was not very marked. Town properties in New Castle (outside of Wilmington) were assessed with an average coefficient for the four years of 28.5 per cent, as compared with 30.1 per cent for Kent, and 34.7 per cent for Sussex. However, rural property in New Castle was the most unequally assessed of all the three counties, with an average coefficient for the four years of 33.0 per cent, as compared with 32.6 per cent for Sussex and 31.1 per cent for Kent. Similarly, no very significant differences appear with respect to the average inequality of all urban as compared with all rural properties sampled. In every one of the years, town properties were assessed slightly better than farm, but the differences were exceedingly slight, averaging less than one point for the four years, and in both cases much inequality was found.

Regressivity.—In addition to widespread inequality as amongst individual properties, Prof. Daugherty found that there was a definite tendency for the assessors to relatively overassess the less valuable properties. This finding was based on an extensive classification of the data according to the value of the properties. The facts for the latest year, 1927, are presented in Table XIX.

TABLE XIX
RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN
DELAWARE, 1927 ^a

VALUE OF PROPERTY	AVERAGE ASSESSMENT RATIO						
	NEW CASTLE			KENT		SUSSEX	
	Wil- mington	Town	Farm	Town	Farm	Town	Farm
80- \$999	98 1	81 9	89 3	91 4	101 5	78 6	108 0
1,000- 1,999	77 0	72 1	89 9	85 4	95 2	86 4	107 6
2,000- 2,999	66 5	77 9	55 0	81 8	100 6	72 8	95 1
3,000- 3,999	61 9	74 2	102 7	69 8	96 1	58 5	78 5
4,000- 4,999	63 3	67 5	84 1	69 8	91 8	66 3	86 5
5,000- 5,999	63 5	65 7	88 8	67 5	69 8	62 0 ^b	85 1
6,000- 6,999	63 7	64 4	71 6	58 1	73 9	...	72 5 ^b
7,000- 7,999	65 4	69 9	76 6	65 2 ^b	77 1	...	...
8,000- 8,999	68 4	55 5	67 9	...	85 8 ^b	...	...
9,000- 9,999	67 2	70 3 ^b	95 5	...	...	...	...
10,000-10,999	67 7	...	96 9	...	...	...	...
11,000-11,999	73 2	...	70 0 ^b	...	...	...	...
12,000-12,999	65 0	...	...	...	...	...	...
13,000-13,999	67 6	...	...	...	...	...	...
14,000-14,999	61 6	...	...	...	...	...	...
15,000-15,999	60 3	...	...	...	...	...	...
Over 15,999	61 4 ^b	...	...	...	...	...	...

^a Source: Daugherty, *op. cit.*, p. 43

^b Average applies to all properties over value of preceding class.

The tendency toward regressivity was least pronounced in the case of properties of Wilmington, being confined, apparently, to only the first few value brackets. Farm properties in New Castle county also failed to reveal any very definite trend. In the case of the properties of the other counties the trend was quite pronounced, with varying degrees of irregularity.

Prof. Daugherty computed the linear trend for each class of property in each of the three counties. On the basis of these computations, he concluded that "an increase of selling value is accompanied by a decrease of the ratio of assessment, except in 1927 for farm properties in New Castle county and for Wilmington properties selling for \$3,000 or more."⁴

Maryland

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, ranging in number from ten to fifty-six within the various counties of the state, are required by law to assess real property at least once in five years in Maryland. They are appointed by the county commissioners, and are paid such compensation as the latter determine. Besides appointing the assessors, the county commissioners sit as a board of review, in which capacity they may hear complaints of taxpayers and may make adjustments upon their own motion.

⁴ Daugherty, *op. cit.*, p. 21.

Cities may have their own independent assessment organization or may adopt the county assessments. In Baltimore, there is a Bureau of Assessment in charge of a Manager, the Appeal Tax Court, which formerly was the chief administrative tax board of the city, now exercising only appellate functions.⁵

In each county, there is a resident supervisor of assessments, who is appointed by the Tax Commission from a list of five persons submitted by the county commissioners. These officials are on a full time salaried basis. They are required to exercise general supervision over the local assessors; to make visits to them; to obtain data on sales; to recommend assessments to the boards of county commissioners during their sessions of review; and to appeal to the State Tax Commission if the latter fail to follow their recommendations.

The State Tax Commission, which is composed of three members appointed by the Governor for terms of six years, hears appeals brought by the supervisors and taxpayers against the decisions of the county commissioners. No state equalization in the orthodox sense of the term is provided for by law, adjustments being confined to changes on such appeal.

STATE SUPERVISION: POTENTIAL.—Extensive powers of supervision and control have been granted to the State Tax Commission by the statutes. It is authorized to prepare forms, schedules and tax books; also to formulate standards or units for the assessment of various kinds of property, to issue instructions to local supervisors of assessments in regard thereto, and to require the use thereof. It is to confer with local officials as often as it deems necessary. It may investigate assessments on its own initiative at any time, and may order reassessments to be made, either by the assessors appointed by the county commissioners or by its own appointed agents. It may remove county supervisors or assessors for incompetency or other cause by its own act after a hearing.⁶

STATE SUPERVISION: ACTUAL.—Although a high degree of state supervision and control is potentially possible in Maryland, such is not the practice. The relations between the county supervisor and the Tax Commission are reported to be very casual, and for the most part, the supervisors are left alone. Moreover, it appears that these supervisors have developed neither the records and equipment nor technical methods necessary to the proper performance of their task.⁷ On the whole, the participation of the state in assessments in Maryland is limited in practice to nominal supervision and to hearing and deciding appeals.⁸

⁵ Ordinance No. 595, approved April 23, 1934, under Laws of 1933, ch. 264.

⁶ Laws of 1929, ch. 226, secs. 166, 167, 171, 173, 174, 175.

⁷ V. J. Wyckoff, "Local Taxation in Maryland," *Bulletin of the National Tax Association*, May 1934, p. 234.

⁸ Conclusion based on Wyckoff, cited above, and on letter from Mr. Jesse D. Price, Chairman of the State Tax Commission of Maryland, under date of June 12, 1934.

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality.*—W. P. Walker and S. H. DeVault have made a comparative ratio study of assessments and sales prices in Maryland.⁹ In one part of this study, 454 rural transfers and 544 urban transfers, all of which occurred in the years 1925 and 1926, were utilized as a sample. When the assessment ratios were computed and classified, the results were as shown in Table XX.

TABLE XX
DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS IN MARYLAND,
1925-1926 ^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES	
	Rural	Urban
Under 20 per cent.	4	16
20-39.	41	91
40-59.	88	185
60-79.	132	147
80-99.	90	49
100-119.	51	27
120-139.	15	11
140-159.	16	8
160-199.	11	8
200 and over.	6	2
	454	544

^a Source: W. P. Walker and S. H. DeVault, *Taxation in Maryland, with Special Reference to Agriculture*, Maryland Agricultural Experiment Station Bulletin 339, Dec. 1932, p. 278.

The ratio of assessed to sales value ranged from less than 20 per cent to over 200 per cent. It is apparent from mere inspection of the table that the test disclosed a very inequitable situation in this state. This conclusion is both confirmed and made more definite when the index of average inequality, namely, the coefficient of dispersion, is calculated. For rural properties, the coefficient of dispersion was 34.9 per cent; for urban properties, 37.7 per cent.¹⁰

Inter-County Inequality.—Another part of this study consisted of an analysis of inter-county inequality. For this purpose, sales values, as disclosed by 2,565 transfers which occurred during the

⁹ W. P. Walker and S. H. DeVault, *Taxation in Maryland with Special Reference to Agriculture*, Maryland Agricultural Experiment Station Bulletin 339, Dec. 1932, pp. 275-280.

¹⁰ Computed by the writer on the basis of Table XX.

years 1918-1926 inclusive, 2,172 transfers which took place in the years 1923-1926 inclusive, and 1,546 transfers made in the period 1927-1931 inclusive (and the first four months of 1932), were compared with their corresponding assessed valuations. Urban properties were segregated from rural. The results were as shown in Table XXI.

TABLE XXI

AVERAGE ASSESSMENT RATIOS OF SAMPLE MARYLAND COUNTIES,
1918-1921, 1923-1926, 1927-1931
(AND FIRST FOUR MONTHS, 1932) ^a

COUNTY	AVERAGE ASSESSMENT RATIO					
	1918-1921		1923-1926		1927-1931 AND FIRST FOUR MONTHS, 1932	
	Farm	Town	Farm	Town	Farm	Town
Caroline	52.8	58.8	67.6	59.8	108.4	74.0
Carroll	58.2	60.6	73.9	54.5	110.9	67.4
Charles	53.2	60.9	70.0	65.8	94.4	75.8
Garrett	67.5	71.6	76.9	62.9	88.1	75.6
Queen Anne's	48.8	58.9	77.8	64.5	85.1	72.1
Washington	41.6	51.2	65.1	54.3	82.0	59.1
All counties	50.6	57.3	70.9	58.6	91.5	66.8

^a Source: Walker and DeVault, *op. cit.*, p. 277

It is apparent that assessment inequalities as between county averages have existed in all three periods. In the latest period, the extremes in this respect were, for farm properties, Carroll (110.9 per cent) and Washington (82.0 per cent); for town properties, Charles (75.8 per cent) and Washington (59.1 per cent).

Rural-Urban Inequality.—Another type of inequality revealed by this table is rural-urban inequality. For example, in recent years, rural property has been very considerably overassessed relatively to urban property. In the period 1927 to the first four months of 1932 inclusive, farm property was assessed at an average ratio of 91.5 per cent, whereas town property was assessed at an average of 66.8 per cent.

Regressivity.—The 6,283 transfers of the above table were also classified according to value groups, in order to learn whether there was discrimination on this basis, and if so, in what direction and to what extent. The results of this grouping of the data were as shown in Table XXII.

TABLE XXII

RELATION OF VALUE OF PROPERTY TO ASSESSMENT
RATIO IN MARYLAND^a

VALUE OF PROPERTY	RURAL		URBAN	
	Number of properties	Average assessment ratio	Number of properties	Average assessment ratio
Under \$1,000	522	92 1	1,195	76 2
\$1,000 to \$5,000	1,675	76 4	1,897	61 2
Over \$5,000	705	56.7	289	54 5

^a Source: Walker and DeVault, *op cit*, p 2791

This table shows that there is a definite and regular tendency to assess the less valuable properties at a relatively higher ratio of assessed to sales value. Farm properties worth less than \$1,000 were assessed at an average of over 90 per cent, whereas those worth over \$5,000 were assessed at an average of less than 60 per cent, those worth from \$1,000 to \$5,000 being assessed at close to 75 per cent. Town properties worth less than \$1,000 were assessed at an average of 76.2 per cent, while those worth over \$5,000 were assessed at an average of 54.5 per cent, with the intermediate group again assessed at an intermediate average, 61.2 per cent.

Summary.—In summary, the investigation revealed extensive individual, inter-county and urban-rural inequality, and pronounced regressivity in assessments of real property in Maryland.

Virginia

ASSESSMENT AND REVIEW.—Organization Prior to 1926.—In order to understand the present rather unusual assessment situation in Virginia, it is necessary briefly to summarize the events which have led up to it. Prior to 1926, real estate had been assessed quinquennially by officials entitled Assessors of Lands. The function of making annual changes (to take into account the construction of new improvements, and personal property administration generally) had been entrusted to other officials called Commissioners of the Revenue.

The 1926 Reorganization.—In 1926, as part of a general reorganization of the tax system, at which time the policy of the separation of sources of state and local revenue was established, the office of Assessor of Lands was abolished. The duty of assessing real property was transferred to the Commissioner of Revenue, and the number of these commissioners was substantially reduced.

Developments after 1926.—Because of this shift of responsibilities and reduction in the number of officials to cope with the task of assessment, and the feeling that in consequence the Commissioners of the Revenue would simply copy the last quinquennial assessment without even making an effort toward new and appropriate appraisals, the General Assembly of 1930 decided to meet the situation by virtually recognizing the futility of attempting new assessments, and entrusting the whole matter to the local boards of equalization. Assessment was made merely optional, instead of mandatory as heretofore, except in the case of the twenty-four cities of the state and four of the counties contiguous to these cities, namely Henrico, Chesterfield, Arlington and Fairfax. For the rural areas in the other ninety-six counties in the state, it was provided that boards of equalization be appointed by the local courts to sit at various places within their jurisdiction and hear and determine complaints.¹¹

Other legislation concerning periodic assessment and equalization was passed in 1932. The latest law, that of 1934, provides for general reassessment and equalization in 1934 and every fourth year thereafter in each of the cities containing more than 12,000 inhabitants. In cities of 12,000 population or less, it is provided that reassessment may be made in 1934, and must be made in 1938 and every fourth year thereafter. With respect to the rest of the state, all of the counties may provide for periodic assessment and equalization in 1934 and every fourth year thereafter, but those counties having a population of more than 500 inhabitants per square mile, and those counties adjoining such a county, or a city of more than 150,000 inhabitants, must provide for reassessment in 1938 and every fourth year thereafter.¹²

Present Provisions.—In general, then, periodic reassessment and equalization are mandatory only in the cities and four counties mentioned, being merely optional in the rest of the counties. In answer to an inquiry concerning the invocation of the optional provisions, the writer was informed that they "have not meant very much in practice."¹³

It is provided by the law of 1934 that the assessing and equalizing officials are to be appointed by the corporation or hustings court of cities and by the circuit court of counties. The equalization boards are to consist of from three to five members. There is no state levy on real property and no state equalization.

STATE SUPERVISION: POTENTIAL.—At the same time that the policy of separation of sources was introduced, a State Tax Commission, composed of the Governor, Auditor, and an appointive member, known as the State Tax Commissioner, was established, superseding

¹¹ W. H. Stauffer, *Taxation in Virginia*, University of Virginia Institute for Research in the Social Sciences, Institute Monograph No. 13, 1931, pp. 70-83.

¹² 1934 Supplement to the Virginia Code of 1930, Appendix, The Tax Code, secs. 242, 344.

¹³ Letter from Dr. Wm. H. Stauffer, Economist, Department of Taxation of Virginia, under date of Nov. 28, 1934.

the former entirely ex officio State Tax Board. In 1927, the administration of the state government was reorganized. As concerns tax administration, the State Tax Commission was supplanted by a new State Tax Department, headed by the State Tax Commissioner. At the present time, the statutory powers of the commissioner with respect to state supervision and control over assessments are of well-nigh negligible importance. They are limited to the preparation of books and forms, and advice and aid upon request—and only upon request—by local boards of equalization or taxpayers.¹⁴

STATE SUPERVISION: ACTUAL.—The one form of state supervision authorized by the statutes, namely, advice upon request of local officials or taxpayers, is largely confined to such matters as construction of the tax laws. On the whole, it may be said that, in conformity with the law of the state, practically no state supervision and control over local assessments is exercised in Virginia at the present time.¹⁵

RECENT ASSESSMENT CONDITIONS.—Roy A. Ballinger and Whitney Coombs have made a ratio test of assessment inequality in Virginia as it existed in 1926.¹⁶ Owners' estimates were utilized as the basis of comparison. A classification of the resulting ratios is presented in Table XXIII.

TABLE XXIII

RURAL AND URBAN DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN VIRGINIA, 1926 ^a

ASSESSMENT RATIO	Percentage of total: rural properties	Percentage of total: urban properties
0- 10.....	1.8	4.6
10- 20.....	14.2	14.7
20- 30.....	20.8	18.2
30- 40.....	21.3	17.1
40- 50.....	17.4	14.3
50- 60.....	8.1	10.0
60- 70.....	3.8	14.4
70- 80.....	3.2	3.8
80- 90.....	3.3	1.5
90-100.....	2.0	.6
Over 100.....	4.1	8
	100.0	100.0

^a Source: R. A. Ballinger and W. Coombs, *Taxation on Farm and Urban Real Estate in Virginia*, Virginia Agricultural Experiment Station Bulletin 268, Sept. 1929, p. 28

¹⁴ Virginia Code of 1930, The Tax Code, ch. 4, sec. 14

¹⁵ Letter from Dr. W. H. Stauffer, cited above, and from Mr. C. H. Morrisett, State Tax Commissioner of Virginia, under date of June 13, 1934.

¹⁶ Roy A. Ballinger and Whitney Coombs, *Taxation on Farm and Urban Real Estate in Virginia*, Virginia Agricultural Experiment Station Bulletin 268, September 1929, pp. 28-30.

As can be observed from examination of this table, there were very substantial variations amongst the ratios. At the extremes, some properties were assessed at less than 10 per cent, others at over 100 per cent. On the basis of the facts of this investigation, Martin and Stephenson have computed the coefficients of dispersion. They were very high - 44.43 per cent for the rural properties, 44.26 per cent for all properties.¹⁷

When the properties were classified according to their locality, very considerable variations were found to exist as amongst the average ratios of assessment and as amongst the coefficients of dispersion. Table XXIV shows the results of this classification, together with the computation of the coefficients of dispersion by Martin and Stephenson.

TABLE XXIV

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION IN
SAMPLE COUNTIES, TOWNS AND CITIES OF VIRGINIA, 1926 ^a

<i>Rural</i>			
JURISDICTION	Number of properties	Average assessment ratio	Coefficient of dispersion
Accomac county	100	31.8	35.54
Augusta county	91	34.6	25.80
Fauquier county	56	33.6	26.46
Halifax county	73	43.0	32.46
Nansemond county	56	48.2	40.58
Rockingham county	76	38.9	42.12
<i>Town and City</i>			
Cape Charles	51	36.7	43.66
Harrisonburg	41	28.0	37.74
Richmond	107	64.0	6.74
Suffolk	44	60.0	40.78
Winchester	53	38.8	28.74

^a Sources: Ballinger and Coombs, *op cit*, p. 30 and Martin and Stephenson, *loc cit*.

Because of the fact that no state tax on real property is levied in Virginia, the variations as amongst county averages is not significant, although the wide variations in the town and city averages are significant with respect to the county levies. The situation depicted with respect to individual inequality within the districts is most important. With the exception of Richmond, with a remarkably low degree of inequality, the rest of the districts made showings ranging from poor to extremely poor.

¹⁷ Martin and Stephenson, *loc cit*.

West Virginia

ASSESSMENT, REVIEW AND EQUALIZATION.—Assessment of real property is made in this state by deputies appointed by the county assessor. The latter, who is elected by popular vote for a three year term and serves on a full-time salaried basis, is ordinarily a supervisory officer. In some of the smaller counties, he frequently assesses one magisterial district himself, but the county assessor of West Virginia does not usually make assessments. Until 1933, county review and equalization had been performed by a county board of equalization composed of three members appointed by the State Board of Public Works. In that year, however, these boards were abolished, this function being transferred to the county courts. There is an ex officio state board of equalization, namely, the State Board of Public Works, composed of the Governor, State Auditor, Superintendent of Schools and the Commissioner of Agriculture, but it has not attempted to equalize in recent years¹⁸

STATE SUPERVISION: POTENTIAL.—The State Tax Commissioner is the administrative head of the tax system. Appointed by the Governor with the advice and consent of the Senate, he holds office for a term of six years. His statutory powers with respect to supervision and control of assessments are extensive. He has general supervisory powers over the local officials; is directed to prescribe forms for them, may require reports from them; may issue instructions to them; and is required to give advice on their request. He is authorized to visit the counties from time to time for purposes of investigation and instruction. He is also required by the statutes to assist the State Board of Public Works in the making of an inter-county equalization, and is authorized to appoint special appraisers for this purpose. He may institute removal proceedings against local assessors in the courts for refusal to obey his instructions, or for official misconduct or neglect of duty. He has the power to order reassessments, and may appoint special appraisers for this purpose.¹⁹

STATE SUPERVISION: ACTUAL.—Although the statutory powers with respect to state supervision over local assessments are wide, central control in West Virginia has been neither extensive nor strict in actual practice. Dr. R. G. Blakey, who has made a thorough study of the facts, has observed that an unfortunate situation has been developing over a series of years which prevents the Tax Commissioner of West Virginia from exercising vigorous control: "The statutes appear to give the Tax Commissioner ample power, but behind the statutes are a long line of practices, traditions and public opinion that practically paralyze much of his seeming power." No state equalization is made; reassessment and removal have apparently not been exercised at all in recent years;

¹⁸ Data on the above section from letter from Mr. Fred L. Fox, State Tax Commissioner of West Virginia, under date of Nov. 20, 1934.

¹⁹ West Virginia Code, 1931, ch. 11, art. 1, secs. 1-6, and art. 3, sec. 1.

and on the whole, the activities of the Tax Commissioner with respect to state supervision and control over assessments in this state are chiefly of a mild advisory and educational sort.²⁰

RECENT ASSESSMENT CONDITIONS—Individual Inequality—The best evidence on assessment inequality in West Virginia is that found in the recent survey of the tax situation in that state by Dr. Blakey.²¹ The method of investigation used was the comparative ratio test, sales values being utilized as the basis of comparison. Transfers of 1,346 parcels, nearly all as of 1929, with a few as of 1928 and 1930 (in those counties where it was difficult to secure sufficient numbers for 1929) constituted the sample. When the ratios were computed and classified, the results were as shown in Table XXV.

TABLE XXV

DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS IN WEST VIRGINIA,
1928-1930 ^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES		
	Farms	Lots	Tracts
0-10	6	8	17
10-20	15	20	16
20-30	26	35	29
30-40	51	58	35
40-50	64	51	24
50-60	50	55	18
60-70	63	70	24
70-80	47	47	12
80-90	34	40	19
90-100	33	25	5
100-110	46	30	22
110-120	21	23	5
120-130	17	10	8
130-140	9	11	4
140-150	11	3	3
150-200	28	20	13
200-300	10	17	13
Over 300	6	11	8
Totals	537	534	275

^a Source: R. G. Blakey, *Report on Taxation in West Virginia*, 1930, pp. 116, 123.

The properties were classified into three main subdivisions: rural properties; urban properties; and tracts, or undeveloped

²⁰ Letter from Mr. Fred L. Fox, State Tax Commissioner of West Virginia, under date of June 14, 1934, and comments of R. G. Blakey. *Report on Taxation in West Virginia*, 1930, p. 179.

²¹ R. G. Blakey, *op. cit.*, chap. v, "Assessment of Real Estate," pp. 107-128.

lands. Within each class, there were extremely great variations in the assessment ratio. The range in the case of farms was from 2.22 per cent to 596.66 per cent; of tracts, from .55 per cent to 955 per cent; of lots, from 2.78 per cent to 1,500 per cent!

The computation of a better measure of inequality than the range, namely, the coefficient of dispersion, pointed to the same conclusion of extremely glaring inequality. The greatest amount of variation from uniformity was found in the case of the tracts, with a coefficient of dispersion of 79.09 per cent. The other classes also showed extremely high coefficients: 59.40 per cent for the urban properties; 52.33 per cent for the rural properties. The average coefficient of dispersion for all types of property was 60.61 per cent.²²

Inter-Class and Inter-County Inequality.—Not only was there great inequality as amongst individual properties. There was also inequality as amongst the three classes of property and as amongst the various counties. Thus farms were assessed on the average at 69.6 per cent, urban properties at 64.4 per cent, while tracts were assessed at only 61.5 per cent on the average. The variations as amongst the average county ratios was even greater, as shown in Table XXVI.

TABLE XXVI

DISTRIBUTION OF AVERAGE ASSESSMENT RATIOS OF COUNTIES IN WEST VIRGINIA, 1928-1930 ^a

AVERAGE ASSESSMENT RATIO	Number of counties
30- 40	1
40- 50 ..	10
50- 60.....	4
60- 70.....	22
70- 80.....	6
80- 90.....	7
90-100.....	4
100-110	0
110-120.....	1

^a Based on Blakey, *op. cit.*, p. 114-115.

Regressivity.—As for regressivity, the following facts were revealed. For farm properties, there was a definite and fairly regular tendency for the ratio of assessment to become smaller as the value of the farm increased. Properties worth less than \$200 were assessed at an average ratio of 273.08 per cent; those worth from \$400 to \$500 at a ratio of 88.06 per cent; those from \$1,100 to

²² Coefficients of dispersion computed by Martin and Stephenson, *loc. cit.*

\$1,299 at 72.83 per cent; those from \$4,500 to \$5,499 at 60.21 per cent. For the urban properties, the tendency was less regular, especially in the case of properties worth from \$600 to \$1,099. At the extremes, properties worth less than \$200 were assessed at an average ratio of 102.40 per cent; those worth \$10,000 and more at 54.16 per cent. The tendency was also somewhat irregular for tracts, but here also the trend was definite. Properties worth less than \$200 were assessed at an average ratio of 137.44 per cent; those worth over \$3,000, at 57.22 per cent.²³

Summary.—Dr. Blakey summarizes the results of the investigation in the following words: "It is stating the present situation in very mild terms to say that the main part of the tax system of West Virginia rests upon a thoroughly unsound and inequitable foundation. Much stronger language would be justified. Tests indicate that not over one-quarter or one-third of the assessments are reasonably good, the other three-quarters or two-thirds range from bad to worse, and from worse to indefensible. The bad results are due largely to the antiquated, inefficient methods of assessment and equalization used in this state."²⁴

North Carolina

ASSESSMENT, REVIEW AND EQUALIZATION—Township assessors, serving as deputies of a county supervisor of assessments (who is himself appointed by the board of county commissioners), quadrennially assess real property in North Carolina. The county supervisor may be, and usually is, a county officer designated by the board of county commissioners to act in this capacity (*e.g.*, the county auditor, tax clerk, accountant or chairman of the board of county commissioners). The actual assessments are made by the township assessors, for which work they are compensated on a per diem basis. In incorporated cities or towns, the board of county commissioners may in its discretion appoint an assessor for each ward or district in the city or town. The county supervisor and the township assessors are required to meet together at various times in order to make adjustments and corrections. So convened, they constitute what is known as the "county board of list takers and assessors." The board of county commissioners serves as a county board of equalization, and in this capacity, reviews and revises the assessment roll, both upon complaint of taxpayers and upon its own motion. It also equalizes as amongst tax districts and localities within the county.

Appeals from the decisions of the county boards may be taken to the State Board of Assessment and Review. This board is composed of the Governor (or a person designated by him), the Commissioner of Revenue, the Chairman of the Corporation Commission, the Attorney-General and the Director of Local Government.

²³ Blakey, *op. cit.*, pp. 127, 128.

²⁴ *Ibid.*, p. 126.

The Commissioner of Revenue is the Chairman of the Board, and exercises its functions when the board is not in session. This board has the power to equalize as amongst individuals, subdivisions of counties, and counties.

STATE SUPERVISION: POTENTIAL—The State Board of Assessment and Review has general supervisory powers over the local assessing and local equalizing officials. It is authorized to confer with and advise them on the preparation and maintenance of suitable records; to prescribe forms; to require reports; and to prepare an instruction book on the law and their duties under it. It is authorized to investigate cases of alleged omissions, fraud and other improprieties. It does not have either of the more drastic powers of supervision, namely, reassessment and removal, but it may call upon the Attorney-General or any prosecuting attorney in the state to assist in the enforcement of the law and of the penalties imposed for the failure, refusal or neglect of public officers to comply with it.²⁵

STATE SUPERVISION: ACTUAL—Since 1921, North Carolina has attempted to pursue a policy of separation of sources, although a state levy on real property has been imposed at times in recent years because of pressing financial needs caused by the depression.²⁶ As a consequence and concomitant of this policy, a tradition of non-interference in the matter of local assessment has developed, and state supervision is very slight.

RECENT ASSESSMENT CONDITIONS—*Rural: Individual Inequality.* Considerable assessment inequality was revealed in an investigation conducted by the special State Tax Commission of North Carolina, described in its 1928 report.²⁷ A rather unusual variant of the estimated value, assessed value ratio test was employed. In each area, a number of persons familiar with the farms of the community were requested to give their estimate of certain specified farms. In this manner, some 3,174 estimates were received on 1,057 pieces of farm property, or an average of three estimates per farm. To these estimates was added the owner's estimate. An average estimate was then obtained for each farm, and this average estimated value compared with the assessed valuation. A classification of the ratios thus obtained yielded results as shown in Table XXVII.

²⁵ P. L. 1933, ch. 204, secs. 200, 202

²⁶ For example in 1930, a state school levy of 15 cents per \$100 was imposed as a county tax, the counties in turn paying the tax to the state. North Carolina Code of 1931, sec 7880.

²⁷ *Report of the Tax Commission, 1928, Part II, chaps. vii and viii*

TABLE XXVII

DISTRIBUTION OF SAMPLE RURAL ASSESSMENT RATIOS IN NORTH CAROLINA, 1928 ^a

ASSESSMENT RATIO	Number of properties
Below 30.....	46
30- 39.9.....	62
40- 49.9.....	84
50- 59.9.....	106
60- 69.9.....	156
70- 79.9.....	138
80- 89.9.....	124
90- 99.9.....	97
100-109.9.....	73
110-119.9.....	47
120-129.9.....	19
130-139.9.....	17
140-149.9.....	16
150 and over.....	35
Total.....	1,020

^a Source. *Report of the Tax Commission, 1928, p. 170.*

As can be observed from inspection of this table, some properties were assessed at less than 30 per cent of their estimated value, others at over 150 per cent. The average degree of disuniformity, as measured by the coefficient of dispersion, was 29.2 per cent, indicating very considerable inequality.

Inter-County Variations of Average Assessment Ratios and Coefficients.—These data were classified according to regions and counties in order to ascertain whether there was variation as amongst the average county assessment ratios. Table XXVIII shows the results of this classification.

TABLE XXVIII

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION IN
SAMPLE COUNTIES OF NORTH CAROLINA, 1928 ^a

REGION AND COUNTY	Number of properties	Average assessment ratio	Coefficient of dispersion
Mountain region:			
Jackson	110	60	30 0
McDowell	53	80	33 5
Ashe	92	61	27 8
Piedmont region:			
Catawba	96	73	19.3
Davidson	106	50	29.8
Pierson	81	77	33 6
Coastal plain:			
Moore	65	71	29 8
Cumberland	107	59	32 9
Lenoir	149	92	37.6
Tidewater region:			
Pender	92	61	26 7
Chowan	69	87	33 0
Totals and averages	1,020	75	29.2

^a Source: *Report of the Tax Commission*, 1928, p 170.

Very considerable inter-county inequalities were revealed. In Davidson county, the average assessment ratio was 50 per cent; in Lenoir, 92 per cent. There was also a good deal of variation in the degree of assessment inequality within the various counties. Thus, Catawba was assessed most equitably, with a coefficient of dispersion of 19.3 per cent; Lenoir, least equitably, with a coefficient of 37.6 per cent.

Regressivity.—When the data was classified according to the value of the properties, a definite tendency for the assessment ratio to decline as the value of the property became greater was revealed for all of the properties under \$16,000. Over this amount, there were a small number of cases showing assessment ratios which were even higher than for the least valuable classes. On the whole, however, the usual tendency toward the regressive operation of the real property tax under present administrative practices was found in this study.²⁸

Urban: Various Types of Inequality.—Urban assessments were also tested by the method of averaging owners' estimates and other estimates, and then comparing the average estimated value so obtained with the corresponding assessed valuation. Some 1,062 properties located in thirty-six cities constituted the sample. The

²⁸ *Report of the Tax Commission*, 1928, pp. 172-173.

average assessment ratio of these urban properties was 58.6 per cent as compared with 75.0 per cent for the rural properties, constituting another type of inequality in this state. No distribution of the individual ratios as in the case of the rural properties was presented, but other types of inequality discovered are indicative of the existence of much inequality as among individual properties. For example, when the cities were classified by regions, as in Table XXIX, the average ratios for the regions were found to vary widely. The extremes were 73.0 per cent for the cities in the Tidewater region and 50.7 per cent for the cities in the Mountain region.

TABLE XXIX

AVERAGE ASSESSMENT RATIOS OF CITIES IN NORTH CAROLINA,
BY REGIONS, 1928 ^a

REGION	Number of cities	Number of properties	Average assessment ratio
Tidewater.	5	115	73.0
Coastal Plain	13	398	59.9
Piedmont	11	423	58.9
Mountain	7	126	50.7

^a Source. *Report of the State Tax Commission, 1928, p. 215*

Regressivity—When the properties were classified according to value, as in Table XXX, again it was found that the least valuable properties received considerably worse treatment at the hands of the assessors than those of greater value. Properties worth less than \$4,000 were assessed on the average at 66.5 per cent, whereas those worth over \$50,000 were assessed at only 56.7 per cent, a difference of about ten points or approximately 16 per cent.

TABLE XXX

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN CITIES
OF NORTH CAROLINA, 1928 ^a

VALUE OF PROPERTY	Number of properties	Average assessment ratio
\$0-\$4,000	473	66.5
4,001-10,000	203	46.1
10,001-50,000	269	60.6
Over 50,000	117	56.7

^a Source: *Report of the State Tax Commission, 1928, p. 216.*

Business-Residential Inequality.—A classification of the properties as to whether they were of business or residential character was made. It disclosed that the business properties were relatively underassessed. The average assessment ratio of the 352 business properties was 57.6 per cent; the average ratio of the 710 residential properties, 63.1 per cent.²⁹

Assessment Practices.—Summary—In addition to the ratio test of assessment inequality described above, the Tax Commission also made a field investigation of assessment practices. Personal visits were made in 98 of the 100 counties of the state, the others being covered by questionnaire. Tardiness in the preparation of the roll, mere copying, and the practice of crude horizontal changes were found to be prevalent in many of the counties. A brief excerpt from the description of the results of this field investigation may serve to conclude our consideration of the performance of this important function in North Carolina.

"Tax books are rarely completed by the time taxes are due and payable, and in some cases are not completed until within the following year, and the taxpayers who desire to pay taxes promptly in many cases cannot do so for this reason. In one county, the 1927 tax books were not completed until March 1928.

"In many counties there has been no real assessment of property of the kind that made inquiry into the actual value of each tract of real property since 1920, either the 1920 value or some uniform percentage of it being brought forward each year, although economic conditions have within that time brought substantial changes in the valuation status of particular pieces and classes of property in particular localities and sections."³⁰

South Carolina

ASSESSMENT, REVIEW AND EQUALIZATION.—Where townships exist, the township constitutes a tax district. Where there are no townships, the county auditor divides the county into tax districts. Except in the case of counties where special laws apply, township and city boards of assessors quadrennially assess the real property in South Carolina. In the townships, the boards are composed of three members appointed for terms of two years by the Governor upon the recommendation of the members of the General Assembly from their respective counties. In the cities, special boards are appointed either by the mayor and council, or by the council alone. In rural areas, the assessors are compensated for this work on a

²⁹ The investigators account for this by the postulation of various possible causes: (a) The greater complexity of business properties; (b) the less organized and less influential character of residential owners, and (c) the fact that business use land values in the cities of the state had been appreciating faster than residence use land values, coupled with the lag of assessed valuations behind market values.

³⁰ *Report of the Tax Commission, 1928*. In 1920, a state-wide reassessment under state direction had been made. See Part III, pp. *infra*.

per diem basis. Whenever a change of over \$100 in the taxpayer's return is made by the board of assessors, the taxpayer must be notified, and he has the right of appeal to the county board of equalization. This board is composed of the chairmen of the respective township boards of assessors. It hears and decides complaints and makes adjustments on its own motion as to individuals and tax districts. Appeals may be taken from the action of these county boards to the State Tax Commission. To the latter body is entrusted the state equalization, which, according to the statutes, may extend to adjustments as amongst individual properties, cities, towns and townships, as well as county aggregates. Further appeals may be taken to the State Tax Board of Review, which is composed of the Governor and six other members appointed by the Governor (with the advice and consent of the Senate) one from each Congressional district. The board is not a full-time body, but is limited to thirty days of hearings by law.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is the administrative head of the tax system. Its statutory powers with respect to state supervision and control over the local assessment are extensive. In addition to the more moderate powers and duties of general supervision, forms, and reports, it may prescribe rules to govern local officials; may visit the counties in order to investigate their work; and may examine into cases in which it is alleged that properties have been omitted, or fraudulently, improperly, or unequally assessed, with power to institute the necessary corrective measures. It has the authority to order reassessments or to make them with its own appointed agents. It may also institute proceedings against assessors for removal for official misconduct or neglect of duty, removal to be made by the Governor after a hearing.⁸¹

STATE SUPERVISION: ACTUAL.—Although the powers of the South Carolina Tax Commission are extensive by statute, there is little evidence that they are extensively applied in practice. In a report of the Tax Commission made in 1921, mention was made of a staff of four field agents, who spent most of their time on mercantile property. The general impression one receives from the more recent reports is that state supervision and control over assessment is not very considerable at the present time.⁸²

RECENT ASSESSMENT CONDITIONS.—No very detailed study of assessment inequality has been made in South Carolina in recent years, to the writer's knowledge. However, there is considerable evidence of the existence of such evils as self-assessment and widespread escape of property from the rolls

⁸¹ Code of South Carolina, 1932, Civil Code, sec. 2426.

⁸² Conclusion based on recent reports of the South Carolina Tax Commission.

Self-Assessment.—In 1921, the work of the township board of assessors, who constitute the very foundation of the system, was described as follows:

"The extent of the assessment work done by these Boards is to examine the returns of the taxpayers, and to accept the taxpayer's own statement of the amount and value of his property, except in rare cases where a taxpayer's return as to value of his land or live stock is so badly out of line with that of his neighbor's as to call for a slight increase or decrease. A canvass of the district and actual inspection of property is not attempted. . . . They have no means of verifying or checking the acreage of the tracts and parcels of land returned. The law allows three days—in years for the return of real estate, five—at two dollars per day, for the work of the Board. The net result is that the property owners of each taxing district in the State virtually assess themselves for purposes of taxation. It will hardly be disputed that no system of taxation depending upon the voluntary contribution plan can be made a success."³³

Lands Escaping Taxation.—In a more recent survey, W. H. Mills made a comparison of acres of land reported for taxation purposes and for census purposes. In 1920, 19,516,800 acres of land were reported by the census. In 1921, 18,718,856 acres and in 1924, 18,621,101 acres were assessed for tax purposes.³⁴ Comments Mills:

"This shows beyond question the great need for an accurate survey of the state and for the keeping up-to-date of an index of real estate transfers in the office of the county assessor . . . Only tax maps can correct these errors with their consequence of gross inequalities of taxation among the farmers of the different counties.

* * *

"With probably \$2,890,000.00 worth of land escaping taxation, at the average tax rate for the state of 46 mills, the sum of \$132,940 is lost to the revenue of state, county, and school districts each year. Certainly there is ground for the statement that a thorough survey would add enough real property to the tax books to pay for itself."³⁵

Further Evidence—Summary.—Further evidence as to omission of property and inequality is furnished by a recent statement of the State Tax Commission. This pronouncement concisely sums up present assessment conditions in South Carolina:

"It cannot be controverted that gross inequalities exist between owners of real property and that a great deal of both personal and real property is not returned for taxation at all."³⁶

³³ *Report of the Joint Special Committee on Revenue and Taxation, 1921* p. 53.

³⁴ W. H. Mills, *The Taxation System of South Carolina*, South Carolina Agricultural Experiment Station Bulletin 231, Sept. 1926, p. 40.

³⁵ *Ibid.*, p. 47.

³⁶ *Eighteenth Annual Report of the South Carolina State Tax Commission, 1932*, p. 5.

Georgia

ASSESSMENT, REVIEW AND EQUALIZATION.—Again great reliance is placed upon the returns of taxpayers. With the exception of municipalities, which may have their own assessing organizations, the county is the assessment unit. County tax receivers, elected by popular vote for two year terms of office, collect the taxpayers' lists. They may, and do, confer with the taxpayer, and may make inquiries of him, but they must finally accept his returns. These returns are then transmitted to the county board of tax assessors, composed of three members, appointed by the county commissioners for terms of six years. They have the power to raise or lower any assessed valuation on their own motion; may investigate assessments; and may add property which has been omitted. Appeals from the action of this board may be taken to a board of arbitration, composed of three members, one appointed by the county board of tax assessors, one by the complaining taxpayer, and the third by the other two thus appointed.

The state equalization is made by the recently established State Revenue Commission, which is composed of the Comptroller-General, and two commissioners appointed by the Governor with the advice and consent of the Senate. After the first appointments, their term of office will be four years. This equalization is confined to adjustments as amongst county aggregates. Counties affected have the right of arbitration if dissatisfied, the board of arbitration being chosen by the state and the county in the same manner as by counties and individuals in the case of a taxpayer dissatisfied with a ruling of the county board. In other words, the state chooses one arbitrator, the county a second, and the two arbitrators select the third.

STATE SUPERVISION: POTENTIAL.³⁷—The statutory authority of the State Revenue Commission with respect to assessments consists in the powers and duties formerly possessed by the Tax Commissioner.³⁷ These powers are not extensive. In addition to equalization, the members of the State Revenue Commission are directed to visit annually the counties of the state for the purpose of (a)

³⁷ There is some confusion as to whether the State Revenue Commission has been granted the powers of the Comptroller General in matters of taxation. Sec. 79 of the Reorganization Act (Acts of 1931) provides that the State Revenue Commission shall "have all the powers and perform the duties formerly vested in the State Tax Commissioner, the Commissioner of Revenue, the Secretary of State in relation to motor vehicles and motorcycles and chauffeurs, and in the Comptroller General in relation to matters of taxation." However, sec. 82 of this act states, "All powers and functions heretofore imposed by law on the Comptroller General, including those vested in and imposed upon him as Insurance Commissioner are hereby imposed and retained." The Comptroller General has taken the position that since sec. 82 follows sec. 79, it is a later expression of the will of the legislature and therefore controlling. This construction of the act has apparently been informally accepted by the other two members of the State Revenue Commission, the Governor and the General Assembly of 1933. Georgia Code, 1933, Editorial Note, p. 2356.

familiarizing themselves with the character and values of the property therein; (b) investigating the work and methods of the boards of county tax assessors; and (c) ascertaining whether the laws are being properly administered. Apparently the Comptroller General has certain powers in connection with the preparation of forms and digests, and is authorized to make rules and regulations for the government of the tax receivers.³⁸

STATE SUPERVISION: ACTUAL.—As has already been observed, the authority of the State Revenue Commission is narrowly confined by the present statutes. Moreover, the commission is hampered in its equalization work by the ever present possibility of arbitration. The end result is that state supervision and control over assessment is not extensive in Georgia.³⁹

RECENT ASSESSMENT CONDITIONS.—The two outstanding characteristics of the Georgia system of assessment are virtual self-assessment and the possibility of arbitration. Both of these elements were vehemently denounced in an investigation of recent conditions made by Prof. H. L. Lutz. As to self-assessment, he declared:

"The Georgia tax receiver apparently has little more to do in determining assessed value than the ushers who pass the plate in church have to say about what the congregation shall contribute. This system may be very appropriately called the 'silver offering' method of assessment. The tax receiver 'receives'; he does not actually view the properties, form his own judgment as to their value, and thus provide for himself an independent basis by which to check the taxpayers' statements of value."⁴⁰

The system of arbitration found in this state is even more roundly taken to task:

"This system of adjusting assessments is not found elsewhere in the United States. It reads like the trial by battle, by hot ploughshares, and by other ancient devices for ascertaining guilt or innocence, truth or falsehood. It certainly transfers the matter from the field of the expert to that of the partisan, and eventually to a more or less impartial, but usually thoroughly incompetent, non-expert umpire. Quite certainly, also, it has no place in modern tax administration.

* * *

"The whole proceeding cannot be too severely condemned . . . It subverts the morals of administrative officers, it discourages any effort to build up a technique of assessment based on the accumulation of factual data, and it converts the whole matter from a serious administrative process into the sham of guess-work, partisanship, and special influences."⁴¹

³⁸ Georgia Code, 1933, ch. 92, secs. 7002-7007, on the powers of the State Revenue Commission, ch. 40, sec. 1502 and ch. 92, secs. 6301-6303, on the powers of the Comptroller-General. See also footnote 37 above.

³⁹ Letter from Mr. Paul H. Doyal, Chairman of the State Revenue Commission, under date of June 11, 1934.

⁴⁰ H. L. Lutz, *The Georgia System of Revenue. Its Problems and their Remedies*, 1930, p. 102.

⁴¹ *Ibid.*, pp. 100-101.

Further evidence is not necessary. With these two basic elements in its system, assessments in Georgia cannot but be inequitable.

Florida

ASSESSMENT AND REVIEW.—County assessors, elected by popular vote for a term of four years and compensated on a commission basis for the work, together with their deputies, annually assess real property in this state. Cities may, and frequently do, have their own assessing organizations. The board of county commissioners sits as a county board of equalization. In this capacity it hears and decides complaints of taxpayers, with power to make adjustments on its own motion. Appeals must be taken to the courts.

STATE EQUALIZATION AND SUPERVISION.—Prior to 1931, an appointive State Equalizer of Taxes had made a state equalization, and an ex officio State Board of Equalizers had heard appeals of county commissioners from his decisions. In that year, as an initial step toward the creation of a new State Tax Commission, both the State Equalizer and the State Board of Equalizers were abolished. However, owing to the inability of the legislators to agree upon any particular measure, none of the bills introduced during the 1931 legislative sessions were enacted into law.⁴²

At the present time, there is no state equalization of the state levy on property, nor is there any supervision over the local assessment except of the most nominal sort. Apart from the duty of county assessors to use the forms and pursue the instructions of the Comptroller, county assessors are allowed complete autonomy.⁴³

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality.*—A ratio test of assessment inequality in Florida has been made by John G. Eldridge and Oscar L. Durrance.⁴⁴ The sample consisted of 807 representative properties selected from ten of the sixty-seven counties of the state. Of this number, 528 properties were urban, 279 properties rural. The time period selected was 1923-1924. When the ratios were computed and classified, the results were as shown in Table XXXI.

⁴² Commerce Clearing House, *State and Local Taxation*, Florida, p. 305. The State equalization was abolished by Acts of 1931, ch. 15027.

⁴³ Compiled General Laws of Florida, Annotated, 1927, sec. 944.

⁴⁴ J. G. Eldridge and O. L. Durrance, *The Assessment of Real Estate for Purposes of Taxation: A Study in Local Taxation*, University of Florida, Bureau of Economic and Business Research, Economic Series, Vol. 1, No. 1, Oct. 1930.

TABLE XXXI

DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN FLORIDA,
1923-1924 ^a

ASSESSMENT RATIO	Number of properties
1-10.....	295
11-20.....	223
21-30.....	131
31-40.....	66
41-50.....	26
51-60.....	25
61-70.....	9
71-80.....	12
81-90.....	8
91-100.....	7
101 and over.....	5
Total..	807

^a Source: J. G. Eldridge and O. L. Durance, *The Assessment of Real Estate for Purposes of Taxation. A Study in Local Taxation*, University of Florida, Bureau of Economic and Business Research, Economic Series, Vol. 1, No. 1, Oct. 1930, p. 15.

The concentration of the majority of the ratios in the classes below 30 per cent, and the wide range of variations are indicative of very pronounced disuniformity. On the basis of the facts of this investigation, Martin and Stephenson have computed the coefficients of dispersion. Extreme inequality was indicated, for both urban and rural properties: urban, 68.92 per cent; rural, 69.60 per cent.⁴⁵

Inter-County Inequality.—When the properties were classified according to counties, the results obtained were as shown in Table XXXII.

⁴⁵ Martin and Stephenson, *loc. cit.*

TABLE XXXII

AVERAGE ASSESSMENT RATIOS OF SAMPLE FLORIDA COUNTIES,
1923-1924 ^a

COUNTY	RURAL		URBAN	
	Number of properties	Average assessment ratio	Average assessment ratio	Number of properties
Alachua	17	40	30	38
Dade	20	6	8	104
Duval	5	16	32	90
Gadsden	14	27	44	14
Hillsboro	22	12	15	112
Jackson	71	18	28	16
Madison	44	38	41	8
Orange	21	11	22	55
Polk	48	8	10	77
Taylor	18	27	35	14

^a Eldridge and Durrance, *op. cit.*, p. 9.

The variations as amongst the average county ratios was extreme. Rural properties in Dade were assessed at an average of 6 per cent, while in Alachua the average ratio was 40 per cent. Urban properties in Dade were assessed at 8 per cent on the average, in Gadsden, at 44 per cent. Between these extremes there were many lesser, yet substantial, variations

Regressivity.—A classification of the properties by value groups revealed a strong and pronounced tendency toward regressivity in the case of both urban and rural properties. Table XXXIII shows the results of this classification.

TABLE XXXIII

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN FLORIDA,
1923-1924 ^a

VALUE OF PROPERTY	AVERAGE ASSESS- MENT RATIO	
	Rural	Urban ^c
\$0-\$2,000	27	27
2,001- 4,000	24	21
4,001- 6,000	17	14
6,001- 8,000	12	16
8,001-10,000	12	11
Over 10,000	7	14

^a Eldridge and Durrance, *op. cit.*, pp. 12 and 15.

Urban properties worth less than \$2,000 were assessed at 27 per cent on the average; those over \$10,000 at practically half this ratio, 14 per cent. The rural properties made an even worse showing, the range being from 27 per cent for the least valuable properties to 7 per cent for the most valuable properties.

Summary.—The results of the Eldridge-Durrance investigation point to the conclusion that assessments in Florida are far beyond the average degree of unsatisfactoriness. All of the usual evils, inter-property inequality, inter-district inequality, and regressivity, were found to exist to an exceedingly high degree.

CHAPTER VI

THE EAST SOUTH CENTRAL STATES¹

Alabama

ASSESSMENT, REVIEW AND EQUALIZATION.—Roll copying is almost sanctioned by law in this state, since it is provided that the assessed valuation of the preceding year be considered as *prima facie* evidence of the value of the property for the current year. In other words, the assessed valuation of the preceding year is to be the assessed valuation of the current year unless proven otherwise. Subject to this limitation, assessments are made annually at a legal ratio of 60 per cent of market value. The assessor is usually compensated for his work on a commission or fee basis, although in some counties he is paid a salary. In either event, he is elected by popular vote for a term of four years. Deputies may be appointed, who are also compensated on a commission basis. Cities may have separate assessment organization if they so elect. Review of complaints is made by the county board of review, which has the power to make adjustments on its own motion. This board is composed of the members of the court of county commissioners (except the judge of probate) sitting in an *ex officio* capacity with the county assessor. Appeal from the decisions of this board lies to the courts.

The state equalization, which is made by the State Tax Commission, extends in its scope to individual properties, but as a general rule the commission does not attempt to take up individual assessments but relies upon its authority to direct the county boards of review to bring about remedial action with respect to such individual inequalities.¹ In each county, the State Tax Commission has a representative, one of whose duties is to sit with the county board of review. By means of this representative, the State Tax Commission may override the county board of review by approving any individual assessment before it goes to the board, or by setting aside any assessment determined upon by the board.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of five members appointed by the Governor and holding office at his will. Its statutory powers in the matter of supervision over local assessments are extensive, and through its county agents it could wield considerable control. Besides the usual powers and duties with respect to general supervision; forms and reports; advice and visits; and the examination into cases of alleged violation of the law, the commission may order the county boards of review to reequalize; may order the county assessors to reassess;

¹ Letter from Mr. John C. Curry, Chief Clerk, Ad Valorem Tax Department, Alabama State Tax Commission, under date of June 13, 1934.

and may make reassessments with its own agents. It is also authorized to institute proceedings for the enforcement of the law, and for the removal of local officers for official misconduct or neglect of duty.²

STATE SUPERVISION: ACTUAL.—Although the statutory powers of the State Tax Commission of Alabama are extensive, and although the existence of the county tax agents presents potentialities for a vigorous policy of state supervision and control, such is not the case in actual practice. The county tax agents are not to be compared with the supervisor of assessments of Wisconsin. They devote only a portion of their time to property tax work, and in some cases even continue in private business. They enter upon their work with no qualifications, rarely make any examination of taxable property or compile assessment data, and in general do not exert a deal of influence.³

RECENT ASSESSMENT CONDITIONS.—*Undervaluation and Inequality.*—The Institute for Government Research of the Brookings Institution has investigated present assessment conditions in its recent survey of state and county government in Alabama.⁴ Two methods of investigation were employed: (a) A comparison of census valuations and assessed valuations; (b) an investigation of assessment practices. Table XXXIV shows the situation as disclosed by the first test for the twenty-seven agricultural counties of the state.

The comparison, it should be noted, is made in terms of value per acre. The investigators call attention to the fact that these values per acre are not strictly comparable. The census reports the value of land in farms only; the assessment data cover, of course, non-farm as well as farm property. In agricultural counties, the non-farm land consists either of forest, wild or uncultivable land, which types of land are less valuable than cultivatable farm land. Hence the census valuations per acre represent a higher value per acre of land than if the census had included all lands. It is the opinion of the investigators, however, that since the greater part of the land area of these counties is devoted to agriculture, the comparison is still substantially valid. On the basis of the facts as disclosed in the table, the following comments are made: "For this group of counties the average ratio of assessed to census value of land and improvements was 31 per cent in 1930. The assessment ratio was higher, however, for land alone. For twenty counties for which data are available the assessment ratio for land was 38.5 per cent, while the assessment ratio for

² Laws of 1923, Act 172, secs. 67-72. [The Code of Alabama, 1928, and Supplement, 1932, are not complete, most of the revenue laws and certain other legislation being omitted.]

³ Institute for Government Research of the Brookings Institution, *Report on a Survey of the State and County Governments of Alabama*, Vol. 4, Part 3, 1932, pp. 273-274.

⁴ *Ibid.*, pp. 127-165.

TABLE XXXIV

RELATION OF CENSUS VALUES TO ASSESSED VALUES IN ALABAMA,
1930^a

DISTRICT AND COUNTY	PERCENTAGE ASSESSED TO CENSUS VALUE		
	Land	Improvements	Land and improvements
TENNESSEE VALLEY			
Jackson			25.0
Lawrence	31.4	11.2	26.7
UPPER CENTRAL PLAIN			
Elmore			27.9
Fayette	56.6	39.4	51.1
Lamar	49.0	30.2	42.6
Marion	56.8	19.1	43.1
Pickens			28.9
LAND MOUNTAIN			
Blount			31.4
LIMESTONE VALLEY			
Cherokee	29.3	10.1	24.2
PIEDMONT			
Chambers	37.6	22.3	31.7
Clay	46.9	10.6	31.0
Cleburne	43.4	28.9	38.5
Cosa			38.9
BLACK BELT			
Greene			29.8
Hale	25.5	12.1	22.5
Lowndes	46.9	18.2	38.6
Perry	38.3	7.4	29.5
Sumter	37.5	9.7	30.0
Wilcox	42.4	13.9	33.4
SOUTH WEST ALABAMA			
Choctaw	68.7	16.6	48.8
Clarke	75.9	14.3	54.9
Conecuh			23.7
Monroe	31.6	18.1	27.7
Washington	44.9	14.3	35.1
Winnegrass	28.2	24.8	27.1
Crenshaw	31.3	19.3	28.5
Geneva	30.6	26.7	29.6
Henry			
All counties	38.5	17.7	31.1

^a Source: Institute for Government Research of the Brookings Institution, *Report on a Survey of the State and County Governments of Alabama*, Vol. 4, Part 3, 1932, pp. 158-159.

improvements in the same group of counties was only 18 per cent. These ratios fall short of the 60 per cent standard required by the statutes.

"There is also a wide divergence from uniformity in the assessment ratios of the individual counties. The assessment ratio for land and improvements varies from 24 per cent in Conecuh county to 55 per cent in Clarke county. Two counties had assessment ratios of more than 50 per cent, but 13 counties had assessment ratios

of less than 30 per cent. The assessment ratios of land alone range from 25.5 per cent to 75.9 per cent. While the ratios for improvements on farm land are generally low, they range from 7.4 per cent to 39.4 per cent."⁵

Assessment Practices.—The investigation of assessment practices, to which reference has been made, was conducted by the questionnaire method of inquiry. Of the sixty-seven counties of the state, thirty-four of the assessing officials replied to the questionnaire. Some of the more important findings of this part of the investigation are cited below:

"In only one county did the assessor have in his office any record of the sales value of property sold, the mortgage outstanding on property, or information contained in building permits. Two assessors reported that they kept in their office a record of the insurance carried on property. Twenty-nine assessors stated that they had no record of sales values, twenty-six that they had no record of mortgage on property or building permits, and twenty-four that they had no record of insurance carried on property. The other assessors who reported gave uncertain answers or stated that they had some of these records, or that although these records were not in the office of the assessor they were available in the office of the probate judge."

* * *

"Generally speaking, no field inspection of real property is made by the assessor to determine its taxable value. One assessor stated that he rides around the county to look the property over, but very few of the people of the county know it. When there is a question about the assessment of a particular piece of property, a field inspection is made in some counties on the order of the board of review or by the county tax agent. Fourteen counties reported that they made no field inspection."⁶

* * *

"These generalizations may reasonably be inferred from a study of the questionnaires. The interrogation of the taxpayer by the assessor when his tax return is filed is largely a formality, since the assessor has no independent source of information which has any semblance of accuracy or completeness as to the amount or value of the property of the taxpayer. Secondly, the procedure for valuation rests upon no adequate information. It resolves itself into the continuance of property values from year to year except in those cases where the taxpayer files a protest with the board of review. The assessor, the county tax agent, or the board of review does not have the necessary information to work a reasonable decision as to the fair and reasonable market value of the property on the date of assessment. Third, the only description of

⁵ *Ibid.*, p. 160

⁶ *Ibid.*, p. 130.

taxable property available to the assessors in practically all counties is that on the tax returns. There is, in short, no uniform technique applied generally in the counties in assessing property and no generally accepted standard of assessment. The procedure amounts in most cases to self-assessment by the taxpayers conditioned upon the legal provision that the assessed value for the preceding year shall be *prima facie* the value for the current year."⁷

Mississippi

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected by popular vote for terms of four years, together with their deputies, biennially assess real property in Mississippi. The county assessors are compensated for their work on a full-time salary basis. Cities ordinarily use the rolls prepared by the county officials, but mayors and councils thereof have certain power of revision and correction. Review of complaints and equalization are made by the county boards of supervisors, appeals lying to the courts. The state equalization is made by the State Tax Commission, which is composed of three members appointed by the Governor for terms of six years. Real property is divided into a number of classes, and this equalization is one of classes and counties.

STATE SUPERVISION: POTENTIAL.—In addition to its equalization functions, the State Tax Commission has general supervisory power over the local officials; is directed to prepare forms; and is authorized to confer with and advise the local assessors on methods of collecting, filing and preserving data. It is required to prepare a pamphlet containing full instructions to the assessors concerning their duties under the laws of the state. One or more of its members is to visit annually the counties in order to investigate the work and methods of the local officials. It is also directed to hold an annual conference of county assessors at Jackson. It has the power to institute proceedings in the courts for the removal of assessors for official misconduct or neglect of duty. It does not, however, have the power to order reassessments, nor to make them with its own agents.⁸

STATE SUPERVISION: ACTUAL.—The activities of the Mississippi Tax Commission are chiefly advisory. It has a force of field agents who work with the county assessors and assist them in arriving at values. It holds annual conferences with the county assessors and makes the required visits. The power of instituting removal proceedings has apparently never been exercised. Even the power of ordering changes by classes of property is not very commonly

⁷ *Ibid.*, pp. 132-133.

⁸ Code of Mississippi, 1930, secs. 7009, 7010, 7016, 7017. By Laws of 1932, ch. 119, the Chairman of the Tax Commission may assign to each of the associate commissioners the duty of visiting the several counties of the state. For this purpose, the state is divided into two taxing districts, northern and southern.

used, the commission preferring to work in an advisory capacity through its field agents before the rolls are transmitted to it, rather than to exercise its legal powers of compulsion.⁹

RECENT ASSESSMENT CONDITIONS—*Individual Inequality.*—The Institute for Government Research of the Brookings Institution has investigated assessment conditions in this commonwealth in its recent survey of state and county government which was made for the Research Commission of Mississippi.¹⁰ A ratio test of assessment inequality, utilizing sales values as a basis for comparison was made. The data were originally collected and compiled by the Mobile and Ohio Railroad Company. Various tests of their accuracy and validity were made and satisfactorily met before it was decided that they could be utilized. Some 20,000 transfers made in 1929 and 1930, covering all of the eighty-two counties of the state were examined, those showing any irregularity being discarded. When the ratios were computed and classified, an extremely inequitable situation was disclosed. The coefficient of dispersion based on these data was computed by Martin and Stephenson to be 40.77 per cent.

Inter-County Inequality.—When the data were classified by counties so as to show the extent of inequality as amongst the average county ratios, great differences were found. Table XXXV presents the facts for this part of the study.

TABLE XXXV

AVERAGE ASSESSMENT RATIOS OF MISSISSIPPI COUNTIES, 1929-1930,
BY DISTRICTS ^a

DISTRICT	NUMBER OF COUNTIES ASSESSING AT AVERAGE RATIOS OF				
	20%- 29.99%	30%- 39.99%	40%- 49.99%	50%- 59.99%	60% and over
Delta. . . . .	.....	2	5	5	1
Brown Loam. ....	.....	2	10	6	1
Shortleaf Pine	1	3	4	4	1
Prairie	1	2	8	2	1
Longleaf Pine	1	6	9	3	1
Gulf Coastal.	2	1	..	.....	..
Totals.	5	16	38	20	5

^a Source: Institute for Government Research for the Brookings Institution (for the Research Commission of Mississippi), *Report on a Survey of the Organization and Administration of State and County Government in Mississippi*, 1932, pp. 95-96

⁹ Data from recent reports of the Tax Commission and letter from Mr. A. S. Coody, Secretary of the State Tax Commission of Mississippi, under date of June 13, 1934.

¹⁰ Institute for Government Research, *Report on a Survey of the Organization and Administration of State and County Government in Mississippi*, 1932, chap. 4, "The General Property Tax: Assessment Procedure," pp. 65-110.

Five counties were assessed at average ratios of from 20 to 30 per cent; five others at 60 per cent and more. In Issaquena county, the average ratio was 73.79 per cent; in Pearl River county, 24.79 per cent.

Assessment Practices.—Summary.—The absence of tax maps (despite the fact that they are required by law), and the inadequacy of records and other equipment are dwelt on at length in the report. The following single excerpt, however, taken together with the results of the comparative ratio test, furnishes sufficient evidence of the general failure of the whole system in this state:

“As a matter of fact, the assessment is by and large a process of self-assessment by the taxpayers. Only rarely does one hear in his travels about the state of an assessor recommending any changes in assessments. These few cases involve only a small number of items of property. Time and time again, the usual experience is that no changes are made in reported assessments except such as are necessary to meet orders of the State Tax Commission or to raise the assessed value on account of needed funds. All too frequently, the changes on these occasions are horizontal changes not involving any adjustment in individual assessments, or more to be deprecated, an adjustment of individual valuations to serve political ends rather than to achieve equitable taxation.”¹¹

Tennessee

ASSESSMENT, REVIEW AND EQUALIZATION—County assessors, elected by popular vote for terms of four years, biennially assess the real property of Tennessee. Cities are to use the county rolls, although many of them have independent assessing organizations under charter provisions and special laws. The county board of equalization, which is composed of five members appointed by the quarterly court of the county, reviews and decides complaints of taxpayers, with power to make adjustments on its own motion. In tax districts containing over 60,000 inhabitants, two of the five members are appointed by the council or other governing board of the city; and in districts of from 5,000 to 60,000, one of the members is so appointed. Appeals from the decisions of the county boards may be taken to the State Board of Equalization, which is composed of the Governor, Treasurer, Secretary of State, Commissioner of Finance and the Superintendent of Taxation. The statutory scope of the state equalization is wide, extending to adjustments as amongst individual properties, classes, wards, and civil districts, as well as counties. Furthermore, if the complaints filed with the state board are sufficiently numerous to justify such action, the state board may reconvene any county board to act upon these complaints and certify its action to it.

¹¹ *Ibid.*, p. 71.

STATE SUPERVISION: POTENTIAL.—At the head of the Department of Finance and Taxation is the Commissioner of Finance and Taxation, who appoints a Superintendent of Taxation as chief of the Division of Taxation, one of the three divisions of the department. The commissioner is appointed by the Governor and holds office at his will. The appointment of the Superintendent of Taxation, which is made by the commissioner, must be approved by the Governor. The powers of the Superintendent of Taxation with respect to supervision and control over local assessments are not extensive. He has general supervisory powers over the local officials; may confer and advise with them; and may prescribe rules and regulations for their government. He is also directed to prepare forms for them, and may require reports pertaining to assessments from them. He does not have any of the more drastic powers of central control, such as removal or reassessment.¹²

STATE SUPERVISION: ACTUAL.—State participation in assessments has been very slight in recent years. The only way, apparently, that the state takes part is in connection with the appellate functions of the State Board of Equalization.¹³

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*.—Dr. F. W. Prescott has made an elaborate study of assessment inequality in Tennessee.¹⁴ The ratio test method, utilizing sales values as the basis of comparison was employed. The data was carefully checked, by reference to buyers and sellers, real estate dealers, and others familiar with property values, and unrepresentative sales, such as transfers between members of the same family, foreclosures, etc were eliminated. In all, 1,929 sales from eleven counties were used, 527 representing farm properties, 1,401 representing city and village properties. When the ratios were calculated and classified, the results were as shown in Table XXXVI.

¹² Code of Tennessee, 1932, sec. 1478.

¹³ Based on recent reports of the Commissioner of Finance and Taxation and letter from Mr. Dancy Fort, present Commissioner of Finance and Taxation, under date of June 13, 1934.

¹⁴ F. W. Prescott, *Assessment and Equalization of Taxes in Tennessee*, University of Chattanooga, 1932.

TABLE XXXVI

DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN TENNESSEE, 1929^a

ASSESSMENT RATIO	Number of properties
0- 10	3
11- 20	36
21- 30	117
31- 40	225
41- 50	357
51- 60	319
61- 70	288
71- 80	256
81- 90	147
91-100	111
101 and over	70
Total . . .	1,929

^a F. W. Prescott, *Assessment and Equalization of Taxes in Tennessee*, 1932, p. 9.

The assessment ratios ranged from less than 10 per cent to over 100 per cent. For all properties, the coefficient of dispersion was 35 per cent. For the farm properties, the coefficient of dispersion was found to be 39.2 per cent.

Inter-County Inequality.—When the properties were classified according to counties, a good deal of inter-county inequality was revealed. The situation was as shown in Table XXXVII.

TABLE XXXVII

AVERAGE ASSESSMENT RATIOS OF SAMPLE COUNTIES IN TENNESSEE, 1929^a

COUNTY	Number of properties	Average assessment ratio
Bradley	94	57.6
Coffee	42	51.4
Davidson	228	56.1
Franklin	41	72.4
Gibson	216	67.2
Hamilton	600	54.5
Knox	216	49.1
Lincoln	62	59.3
Madison	200	59.3
Marion	9	73.9
Shelby	221	58.9

^a Source: Prescott, *op. cit.*, p. 7.

Whereas the average assessment ratio in Knox was 49.1 per cent, the average assessment ratio in Marion was 73.9 per cent. There were smaller, but substantial differences in the averages of the other counties.

Regressivity.—When the farm properties were classified by value, a tendency toward regressivity was revealed. The trend was not altogether regular, as Table XXXVIII, presented below, shows.

TABLE XXXVIII

RELATION OF VALUE OF FARM TO ASSESSMENT RATIO IN TENNESSEE, 1929 ^a

VALUE OF PROPERTY	Number of properties	Average assessment ratio
\$0-\$2,000	235	57.7
2,500-5,000	137	72.9
5,000-10,000	93	64.5
10,000 and over	62	46.1

^a Source: Prescott, *op cit*, p. 22

Properties worth \$2,500 or less were assessed at an average of 57.7 per cent; those worth \$10,000 or more, 46.1 per cent. Properties worth from \$2,500 to \$5,000 were assessed at an average ratio of 72.9 per cent; those worth from \$5,000 to \$10,000 at an average ratio of 64.5 per cent. The general trend was definitely toward lower average assessment ratios for the more valuable properties, but this trend was irregular.

Substantially the same situation with respect to regressivity was found in the case of the urban properties. Table XXXIX shows this situation.

TABLE XXXIX

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO OF URBAN PROPERTIES IN TENNESSEE, 1929 ^a

RESIDENTIAL			BUSINESS		
Value of property	Number of properties	Average assessment ratio	Value of property	Number of properties	Average assessment ratio
\$0-\$5,000	467	56.6	\$0-10,000	51	65.2
5,000-10,000	236	58.8	10,000-25,000	43	62.9
10,000-15,000	119	54.3	25,000-50,000	22	67.7
Over 15,000	123	50.7	50,000-100,000	35	61.2
			Over 100,000	31	55.9

^a Source: Prescott, *op. cit.*, pp. 24-25

Residential properties worth \$5,000 or less were assessed at an average ratio of 56.6 per cent; those worth over \$15,000, at 50.7 per cent. Business properties worth \$10,000 or less were assessed at an average ratio of 65.2 per cent; those worth more

than \$100,000 at an average of 55.9 per cent. There was, however, some irregularity in the trend toward regressivity in both the case of the residential and the business properties.

Inter-Class Inequality.—For the 527 farms, the average assessment ratio was found to be 54.1 per cent. For the 1,219 city and village residential properties, the average assessment was 54.6 per cent. For the 182 commercial and industrial urban properties, the average assessment ratio was 57.4 per cent.

Further Evidence.—Summary.—The following observations by Dr. Prescott may serve to summarize our survey of assessment conditions in Tennessee.

“Selecting at random from the number in Hamilton county, we find a store assessed at 60% of its value, a valuation which was \$10,000 less than the face value of the mortgage on the land; secondly, a gasoline and oil service station in a suburban location assessed at 24.6% of its value, as revealed in a cash transfer; a ten-story office building with a 45.5% assessment, which figure was actually \$122,500 less than the encumbrance on the property. One further example in this county reveals an amusement park paying taxes on a property assessed at 25% of its value which was \$50,000 less than the mortgage. When the official’s attention was called to this case, a shift in the assessment figures occurred, raising the assessment to 47.2% of the value, as compared to a 70% valuation of a similar commercial amusement site in Shelby county.

“In Knox county an office building had an assessment of 57.1% of the value, as compared with identical buildings in Chattanooga and Memphis assessed at 45 5% and 48% respectively. A hotel building in Knox county was appraised at 34% of its value as compared with one in Hamilton, at 52%; and three in Shelby assessed at 68 3%, 68%, and 63% respectively of their value, and the last named property had a mortgage of \$220,000 in excess of the assessed value. Such a list might be extended indefinitely, but enough examples have been given to support the facts.”¹⁵

Kentucky

ASSESSMENT, REVIEW AND EQUALIZATION.—Kentucky is the only state in the country which requires that its assessors, who are called county tax commissioners, be technically qualified for this work. Before any applicant for the position is eligible for election, he must obtain a certificate from the State Tax Commission stating that he has been examined by it and that he is qualified for the office. Every fourth year, the Tax Commission gives an examination designed to test “the applicant’s experience as an assessor, his knowledge of the geography of the county in which he expects to become a candidate, his knowledge of the industries

¹⁵ Prescott, *op. cit.*, pp. 25-26.

and property of such county, and his elementary training and business experience to fill the office."¹⁶ No certificate is issued unless the candidate makes a mark of at least 75 per cent: Having qualified and being elected, the county tax commissioner holds office for a term of four years. He is paid on a fee basis (in counties of over 200,000 population, there is a maximum set by law). He is permitted to appoint, with the approval of the Tax Commission, such deputies as may be necessary to assist him. Real estate is assessed annually by these county tax commissioners and their deputies, except that cities have their own assessment organization. Review of assessments is made by the county board of supervisors, which has the power to make changes both on complaint of taxpayers and on its own motion. Appeals may be taken to the State Tax Commission, which also makes the state equalization. The scope of this state equalization is wide, extending to individual properties.

STATE SUPERVISION. POTENTIAL.—The State Tax Commission is composed of three members, appointed by the Governor with the confirmation of the Senate for terms of four years. It has extensive powers of supervision and control over the local assessment. Besides general supervision, advice; forms; reports; conferences and visits, it possesses a good deal of mandatory power. It is authorized to call annual conventions of county tax commissioners, at which attendance is compulsory upon penalty of removal for wilful failure to attend. It is its duty to investigate all cases where evasion, negligence or impropriety is alleged, with power to take the necessary corrective measures. It is authorized to order reassessments. It may institute proceedings in the courts for the removal of county tax commissioners for wilful failure to attend the conventions called by it, and for official misconduct or neglect of duty.¹⁷

STATE SUPERVISION: ACTUAL.—As is the case with many other tax commissions, the Kentucky Tax Commission is not as aggressive as it once was in the matter of state supervision and control over local assessments. However, its activities are moderately extensive. It has a force of field men who co-operate with the county boards of equalization. It also hears and decides a considerable number of appeals. Its power to make reassessments has been attempted only once, and the Court of Appeals decided against the commission on a technicality.¹⁸

¹⁶ Carroll's Kentucky Statutes, 1930, secs 4042-a-11.

¹⁷ Carroll's Kentucky Statutes, 1930, secs. 4114-i-1, 12, 14, 18.

¹⁸ Based on *Report of the Efficiency Commission of Kentucky*, "The Government of Kentucky," Vol I, Part II, 1924, p. 258; and letters from Mr John B. Lewis, Chairman of the State Tax Commission of Kentucky, under dates of July 9, 1934, and August 28, 1934. Stated the Efficiency Commission in 1924: "The reports of the Tax Commission and the statistical results of its operations, offer abundant evidence that some of the enthusiasm and energy with which it first embarked upon its task of bringing into operation a reformed tax system has evaporated."

RECENT ASSESSMENT CONDITIONS.—As part of an analytical study of the alleged improvement in the assessment of real property which general classification of property is supposed to produce, Prof. Simeon E. Leland made an investigation of assessments in this state after classification had been established.¹⁰ Two sets of facts were presented: (a) a comparison of assessments upon opposite sides of a county line of substantially similar lands; (b) a ratio test.

With respect to the first body of evidence, the tracts of land selected did not differ materially with respect to situation, topographical and soil factors, nor economic values per acre, but the assessments showed marked differences in value per acre. The facts were as shown in Table XL.

TABLE XL
COMPARISON OF ASSESSED VALUATIONS OF SUBSTANTIALLY SIMILAR
PROPERTIES ON OPPOSITE SIDES OF COUNTY LINE IN
KENTUCKY, BY VALUE PER ACRE^a

COUNTY LINE			
Owner	Value per acre	Value per acre	Owner
A	\$100	\$155	A
	105	150	
		155	
	90	99	
	120	155	
	100	155	
B		93	B
		150	
	65		
C	85	125	R
	85	126	
D	45	129	S
E	110	129	T
F	45	150	U
G	40	129	V
H	30	103	W
I	50	26	X

^a Simeon E. Leland, *The Classified Property Tax in the United States*, 1928, p. 291

In the opinion of the assessor on the right side of the county line, land was generally worth much more than to the assessor on the left. Their views were in a few cases quite close, as for example for the fourth tract of owner A. But on the whole they differed markedly. In one case, land valued at \$45 per acre by the assessor left of the line was valued by the assessor right of the line at \$150; in another, at \$129 and \$40 respectively. Such differences indicate either one or the other of the assessors to be wrong, or more probably, that neither was right.

¹⁰ Simeon E. Leland, *The Classified Property Tax in the United States*, 1928, pp. 289-293.

The second test consisted of a classification of ratios of assessed value to sales value for Fayette county. The data consisted of 634 sales records, as of 1924, compared with their corresponding assessed values. Table XLI shows the results of this test.

TABLE XLI .

DISTRIBUTION OF AVERAGE ASSESSMENT RATIOS IN SAMPLE
KENTUCKY COUNTY, 1924, BY VALUE OF PROPERTY ^a

VALUE OF PROPERTY	Average assessment ratio
\$0- \$500	83 22
500- 1,000	83 31
1,000- 2,000	64 38
2,000- 3,000	61 96
3,000- 4,000	66 39
4,000- 5,000	65 35
5,000- 6,000	64 76
6,000- 7,000	59 06
7,000- 8,000	58 04
8,000- 9,000	61 11
9,000-10,000	57 08
10,000-20,000	56 84
20,000-30,000	56 14
30,000 and over	51 14

^a Source. Simeon E Leland, *op cit*, p 292.

The effect of the assessment practices, as shown by this table, was as if the tax rate had been diminished as the value of the property taxed became greater. Such taxation, in which the less valuable properties are so markedly overassessed relatively to the more valuable properties, results in excessively high taxes on the mass of taxpayers and inexcusable regressivity.

CHAPTER VII

THE EAST NORTH CENTRAL STATES'

Ohio

ASSESSMENT, REVIEW AND EQUALIZATION.—In several of the states in the north central region of the country, assessment is performed by officials acting in an *ex officio* capacity. In Ohio, the function is entrusted to the county auditor. He usually appoints deputies to assist him. Assessments are required to be revised every sixth year, but the county auditors may make revisions in intervening years at their discretion. The county auditor, treasurer, and president of the board of county commissioners constitute a county board of revision. This board has the power to review and revise the rolls, both on complaint and on its own motion. Appeals from its decisions may be taken to the State Tax Commission, which also makes the state equalization. This equalization, although it extends in scope to adjustments as among cities and villages by statute, is limited in practice to changes in county aggregates.¹

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of four members, appointed by the Governor for terms of six years.² It has general supervisory powers over the county auditors and county boards of revision. It is authorized to construe the tax laws and issue rules and regulations for the governance of the local officials. It is its duty to furnish assessment forms for and require reports from them. It may require them to meet and confer with it at times and places designated by it. It is authorized to institute proceedings in the courts to remedy improper or negligent administration of the tax laws, but the power of removal is not specifically mentioned. It may order the county auditor to reassess, but is not empowered to make reassessments with its own personnel.³

STATE SUPERVISION: ACTUAL.—The activities of the Ohio Tax Commission in the matter of real property assessments do not appear to be very extensive. The county auditor is recognized as the chief assessing officer and little is done to interfere with his autonomy. During the past eight years, only one reassessment has been ordered.⁴

¹ Throckmorton's Annotated Code of Ohio, 1930, and Supplements, sec. 5613. Letter from Mr. Quincy A. Davis, Chairman of the Ohio Tax Commission, under date of June 13, 1934.

² An additional member was added to the former board of three by Laws of 1931, S. B. 329, p. 797.

³ Throckmorton's Annotated Code of Ohio, 1930, and Supplements, secs. 5623, 5624, 5624-1, 5624-2, 5624-3, 5624-4, 5624-9.

⁴ Letter from Mr. Quincy A. Davis, Chairman of the State Tax Commission of Ohio, under date of June 13, 1934.

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*.—H. R. Moore has made a ratio test investigation of rural assessment inequality in his recent survey of the farm tax situation in Ohio.⁵ Over 1,600 sales values, representing ten counties, were utilized as a sample. The assessed valuations were as of the quinquennial assessment made in 1925; the transfers took place shortly after this revision. When the ratios were computed and classified, the results were as shown in Table XLII.

TABLE XLII

DISTRIBUTION OF SAMPLE RURAL ASSESSMENT RATIOS IN OHIO, 1925^a

ASSESSMENT RATIO	Number of properties	ASSESSMENT RATIO	Number of properties
16-20	1	101-105	86
21-25 ..	2	106-110	74
26-30	6	111-115	61
31-35	12	116-120 ..	38
36-40	19	121-125	38
41-45	23	126-130	23
46-50	33	131-135	25
51-55 .	54	136-140	16
56-60 ..	90	141-145	11
61-65	83	146-150 .	7
66-70	108	151-155	5
71-75	112	156-160 ..	7
76-80	150	161-165 .	2
81-85 .	112	166-170	8
86-90	124	171 and over....	20
91-95	159		
96-100	100	Total.	1,609

^a Source H. R. Moore, *Taxation as Related to the Property and Income of Ohio Farms*, Ohio Agricultural Experiment Station Bulletin 459, Sept. 1930, p. 34.

The ratios were found to range from less than 20 per cent to over 171 per cent. The central half of the properties ranged from 69.56 per cent to 102.22 per cent. On the basis of the facts of this table, Martin and Stephenson have computed the coefficient of dispersion to be 24.83 per cent, indicating very substantial average inequality.

Regressivity.—No direct attempt to test regressivity was made. However, Moore points out that since the median ratio, the position average, was lower than the arithmetic average ratio between the total sales value of the properties and the total assessed value of the properties, the higher priced properties must have been assessed at relatively lower ratios than the less valuable properties.⁶

⁵ H. R. Moore, *Taxation as Related to the Property and Income of Ohio Farms*, Ohio Agricultural Experiment Station Bulletin 459, Sept. 1930, pp. 34-38.

⁶ The number basis average ratio was 85.95 per cent; the value basis average ratio, 81.25 per cent.

Moreover, another classification of the data indicated that the best farms were relatively underassessed. When the farms were rated as to productivity, character of improvements, type of road, and distance from market, it was found that, with slight exception, the farms with the best ratings with respect to these factors were assessed at the lowest ratios. Conversely, with a number of minor exceptions, the farms with the poorest ratings were assessed at the highest ratios. Since these factors are intimately associated with value, it may be logically inferred that the real estate tax on rural properties in Ohio is regressive in operation. Table XLIII shows the facts upon which these conclusions are based.

TABLE XLIII

RELATION OF ASSESSMENT RATIO TO CERTAIN SPECIFIED FACTORS OF VALUE, OHIO FARM PROPERTIES ^a

RATING	Number of farms	Average assessment ratio
<i>A. Productivity</i>		
Good.	144	74
Fair	113	94
Poor	83	92
<i>B. Improvements</i>		
Good	84	88
Fair.	106	86
Poor	57	91
<i>C. Roads</i>		
Paved	92	80
Gravel	169	88
Earth	79	91
<i>D. Distance from Market</i>		
Miles to market		
1	40	80
2	69	87
3	80	92
4	55	92
5	50	92
6	32	89
7	15	92
8 or more	19	93

^a Source: Moore, *op. cit.*, p. 36.

Assessment Practices.—In addition to this evidence, which is confined to the rural situation, assessment practices throughout the entire state have been described by Dr. R. T. Compton, who was Director of Research of the recent Governor's Taxation Committee of Ohio. The field investigation method was employed in the survey made by this committee. The findings were set forth as follows by Dr. Compton in an article in *The Tax Magazine*:

"With a few outstanding exceptions, such as Cuyahoga county,

where Auditor Zangerle sets a national example, representatives found the actual administration of the tax on real estate by locally elected political officials, responsible to no one, to be almost universally dilatory, ineffectual and careless. In the average county, while the auditor watches the *general level of assessments* carefully and adjusts it from time to time as a means of performing the *legislative* functions of raising more revenue or curtailing public expenditures, he takes no interest in the *administrative* function of assessing property at its true value, and astonishingly little interest in the uniformity of individual assessments.

"Insofar as no general reappraisal of the state had been made since 1926, and as few auditors were found who were familiar with the methods used at that time, the survey of real property tax administration was of necessity confined to the methods of making year-to-year readjustments, the status of records and the progress of attempts to prepare for the 1931 reappraisal.

"The chief activities of the assessing office during the year intervening between general reassessments should consist of assessing new buildings and structures, reappraising certain properties that have changed materially in value, and revising the lists of exempt property. These will be discussed in order.

"The first requisite of a satisfactory real estate duplicate is a scientific recording system. Thirty-three counties were found in which such records are kept. Twenty-five of these keep card or other special record systems showing the values of all buildings on each parcel of land as corrected for changes by the boards of revision, and for new construction and removals. Eight counties make similar entries on the records of the previous general reappraisals. Of the remaining counties, forty-eight merely make the necessary changes on the duplicate, while seven make them on the transfer records.

"The latter two methods, followed in fifty-five counties, do not provide a complete record of the type, size, age and value of each structure on each parcel of land (as do the first two methods), but show only the total value of all buildings and structures on each parcel. In these cases it is impossible to determine the value of individual buildings and consequently it is difficult for a board of revision to act intelligently on complaints. Furthermore, where the records show only the aggregate value of all buildings on each parcel of land, it is impossible to make proper corrections on the duplicate in cases of removal or destruction. The law is clear on this matter. The auditor 'shall note in his platbook separately, the value of all dwelling houses, mills and other buildings which exceed one hundred dollars in value' . . .

"When an adequate record system is kept, there remains the task of keeping it up-to-date. The law recognizes two ways of obtaining information regarding new structures. Where municipalities have systems of building permits, the auditor may obtain his information from the registration records. In other districts it is provided that owners must report construction of new buildings to the auditors.

"It was found that the auditors check the records of building permits in the cities of twenty-four counties. In fifty-six counties there were no consistent efforts to list all new structures, while in several additional counties the auditors relied entirely on the voluntary returns in some districts.

"The assessors of personal property can also be directed to list new buildings, and this method is followed in all districts of seven counties and in the rural districts of seven additional counties.

"Five auditors send out other employees to list new buildings. A number of auditors reported that personal property assessors list new buildings 'if they notice them,' and apparently this, together with the acceptance of voluntary returns, is the extent of the effort to find these properties throughout most of the state, even where building permit records are available. In *one county the auditor reports that he sends out volunteer women to measure the sizes and note types, ages and conditions of buildings*

"There are two general methods of appraising buildings and structures. The procedure which is commonly accepted as the most scientific is that under which the assessor in the field procures the necessary information (relative to location and type, size, condition, etc. of structure) and the valuation is made from these data in the assessor's office. When such a procedure is followed, valuation becomes less a matter of judgment, and more a matter of measurement, and the result that may be expected is a more uniform appraisal of property. This procedure is followed in all districts of twenty-one counties and in the municipalities of nine other counties. In the remaining districts of the latter nine counties, and in the remaining fifty-eight counties, the auditors depend upon the judgments of their assessors, who appraise the buildings in the field.

* * *

"The information thus far presented concerns the revision of the duplicates between reappraisal years. Before passing on to the methods of handling complaints and revisions and the completion of the duplicate, such information as was obtained relative to methods applied in general reappraisals and preparations for the 1931 reappraisals may be introduced at this point.

"The most important step in the assessment of real property is the determination of valuations. The methods by which buildings are appraised have already been described. An attempt was also made to obtain information regarding land appraisals in the various counties. The variations are too great to permit detailed discussion at this point.

"A number of the auditors employ appraisal companies to appraise all or part of the lands of their respective counties. Others appraise property with the advice of local real estate boards and other bodies. Most of the auditors, however, employ assessors to appraise at least part of the lands, and in most of the counties

these assessors are brought together for instruction in valuation before the appraisals begin. In some counties, however, assessors are merely employed and sent out to fix the values of property without previous instruction. In some cases the assessors are provided with the valuations at which the various parcels of property were formerly assessed. In other cases they are given only the maps of the districts they are sent to assess, although these maps are not always provided. In some counties, after the field assessors make the original appraisals the auditors attempt to equalize these valuations between the various districts. In short, the methods range from those of Cuyahoga county, where the most scientific appraisal methods are developed and employed, to those counties in which the auditors merely send out assessors to appraise property at whatever they think it is worth, with no instructions and no maps, and accept the resulting valuations without subsequent check or equalization.

"As regards preparations for the next reappraisal, sixty-seven auditors reported (during the latter half of 1930) either that their tax maps and plat books were up-to-date, or that the county surveyors were then engaged in revising them. In twenty-one counties the maps and plat books were obsolete and nothing was being done about it. Part of these counties were, however, visited before the November elections of 1930. Several of the auditors stated that they would not be re-elected and that the reappraisals would be the tasks of their successors. In cases in which these officers were re-elected, preparations for the coming reappraisals may have been begun since the field study was made. In other cases, as the new auditors did not take office until the second Monday in March, presumably no advance preparations were made.

"During 1930, the tax maps and plat books were up-to-date in forty-six counties. Five auditors had no maps and three had no plat books. Ten counties had maps and plat books that were correct at the time of the last general reappraisal but have not been revised since, while in eleven counties it was reported that the maps and plat books had not been brought up-to-date for the last general reassessment and in seven of these they had never been.

"Aside from revising maps, eighty-one auditors, late in 1930, were doing nothing to prepare for the 1931 reappraisal. A few, however, were having field sheets prepared, and two reported that they were gathering sales data, while two had already revalued some of the property for their counties. In a county in which the auditor has constantly revised his tax list and has added all new structures, little preparation should be required for a general reappraisal; in fact, a general reappraisal, except for a normal annual check of property listings and valuations, might not be necessary. The information gathered during the course of the committee's field investigation, however, did not indicate that this was the general situation. Very few counties appear to make such interim revisions in the tax lists as could normally be relied

upon to insure the continued representation on the tax duplicates of each parcel of land and each structure thereon at its value.”

Summary.—From this description of assessment practices, and bearing in mind the results of the ratio test study made by Moore for the rural situation, it may be concluded that rural inequality and regressivity are extensive; that some of the cities have developed and are employing modern technical methods; but that on the average, assessment administration is “dilatory, ineffectual and careless” throughout the state.

Indiana

ASSESSMENT, REVIEW AND EQUALIZATION.—Township assessors, compensated for their work on a per diem basis in the less densely populated townships, and on a salary basis in the more populous counties, quadrennially assess real property in Indiana. These officials are elected by popular vote to serve for a term of four years. They are required to perform their duties under the supervision of county assessors, also elected by popular vote for a term of four years. The county assessors are on a full-time salary basis. They are required to advise and instruct the township assessors as to the proper performance of their duties. For this purpose, they are to visit each township during the spring of each year. They are also authorized to assess property which has been omitted from the rolls and to assist in the county equalization. The latter is made by a board composed of the county assessor, the auditor, treasurer, and two members appointed by the circuit court. This board has the power to make adjustments on its own motion as well as to hear and decide complaints of taxpayers. Appeals from its actions may be taken to the State Board of Tax Commissioners, which is composed of three members appointed by the Governor for terms of four years. This state board also makes a state equalization, by counties and classes. Its mandatory power with respect to equalization until very recently did not extend to subdivisions of counties: it could order the county board of equalization to reconvene to consider its recommendation with respect to such changes, but could not compel the county board to adopt them. By Acts of 1935, ch. 306, however, it was granted the authority to equalize as amongst tax districts.

STATE SUPERVISION: POTENTIAL.—The State Board of Tax Commissioners has extensive powers of state supervision and control over assessments conferred upon it by the statutes. It is authorized to prescribe and promulgate all forms of assessment schedules, blanks and tax books; to construe the tax laws; and to make general rules and regulations to govern the local officials. One or more members of the board or its authorized representative must visit

⁷ R. T. Compton, “Romance and Reality. The Law and Practice of General Property Tax Assessment in Ohio,” *The Tax Magazine*, Dec. 1931, pp. 435-437.

each county at least once a year. It is directed, furthermore, to call an annual meeting of the county assessors for purposes of guidance and instruction. It is required to investigate cases where violation of the law is alleged. It possesses the power of direct administrative removal, the only qualification to full authority being the right of appeal of the local official removed to the judge of the circuit court. It has the power to order reassessments to be made either on complaint of taxpayers or on its own motion.⁸

STATE SUPERVISION: ACTUAL.—The influence of the State Board of Tax Commissioners, in practice, is exerted mainly through its large staff of property tax experts, consisting of eight special representatives and an engineer. The latter assists in assessing difficult properties, such as industrial plants, etc., upon request of local officials. The special representatives are each assigned to a district, where they make themselves familiar with local assessments and local conditions. They assist the local assessors; make recommendations to them and to the county boards of equalization (and to the state board in the event that the local officers fail to follow their recommendations). The power to order reassessments is limited by a decision of the Supreme Court of the state, wherein it was held that for the State Board to order a reassessment, the facts in the case must show that the county to be reassessed is out of line with other counties of the state. It is not very often invoked. The power of removal was exercised once in the early twenties, when the law provided for an appeal to a jury rather than to the judge of the circuit court, and the jury returned a verdict in favor of the assessor. The law was later changed to its present form, but the board has never exercised the right since that time. On the whole, it may be said that state participation in assessments in Indiana is quite extensive, being carried on largely through the influence of the direct representatives of the State Board of Tax Commissioners upon the county boards of equalization.⁹

RECENT ASSESMENT CONDITIONS.—*Individual Inequality*.—Dr. R. W. Nelson and Mr. G. W. Mitchell have written an excellent monograph on assessment conditions in five mid-western states, one of the states considered being Indiana¹⁰. The ratio test method, with almost exclusive reliance on sales values, was used. For the state of Indiana, some 759 transfers of properties in cities and towns of seven counties constituted the sample. The time period during which these transfers were made was 1928–1929. The assessment ratio for each individual property was calculated, the ratios

⁸ Burns Indiana Annotated Statutes, 1933, secs. 64–1301, 1303, 1309. The reassessment statute was recently modified by Laws of 1935, H. B. No. 204.

⁹ Letters from Mr. Philip Zoercher, Chairman of the State Board of Tax Commissioners of Indiana, under dates of June 16, 1934, July 19, 1934, and August 28, 1934.

¹⁰ R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and other Mid-Western States*, Iowa University, Commerce College, Business Research Bureau, Iowa Studies in Business Number 10, January 1931, chap. vi.

were computed and classified, and the coefficient of dispersion calculated. This last figure was found to be 31.95 per cent, indicating a very inequitable situation.¹¹

Inter-County Inequality.—Variations as Amongst Coefficients of Dispersion.—Variations were found to exist, also, as amongst the average ratios, and as amongst the coefficients of dispersion of the various counties. Table XLIV shows these findings.

TABLE XLIV

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION OF
SAMPLE INDIANA COUNTIES, 1928-1929*

LOCALITY	Number of properties	Average assessment ratio	Coefficient of dispersion
Franklin	131	85.02	29.12
Edinburg			
Greenwood			
Shelbyville	93	76.55	26.78
Morristown ...			
Huntington	98	85.96	31.53
North Judson	31	66.71	35.36
Hamlet.			
Knox			
Marion.....	124	70.82	37.15
Kokomo.	156	73.83	34.36
Logansport.. . . .	126	74.94	29.33

* Source. R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and other Mid-Western States*, Iowa University Commerce College, Business Research Bureau, Iowa Studies in Business No. 10, January 1931, p. 129.

The average assessment ratio of the county in which North Judson, Hamlet and Knox are situated was found to be 66.71 per cent, whereas Huntington was assessed at an average of 85.96 per cent. While this range is substantial, the degree of inter-county inequality does not appear to be as great as in the case of many other states where state supervision and control are not so extensive. More important than the variations in the average assessment ratios were the variations in the quality of assessment within the counties, the county in which Shelbyville and Morristown are located being relatively best assessed with a coefficient of dispersion of 26.78 per cent, while Marion was relatively worst assessed with a coefficient of 37.15 per cent.

Regressivity.—When the data were classified by value groups in order to test the progressivity or regressivity of the levy, regressivity was found pronouncedly in four of the counties,

¹¹ Nelson and Mitchell, *op. cit.*, p. 127.

slightly in three. On the whole, the tendency to assess the more valuable properties at a lower ratio than the less valuable properties, so commonly found in the other investigations of assessment inequality surveyed, was revealed again in this study.¹²

Illinois

ASSESSMENT, REVIEW *and* EQUALIZATION.—In counties with township organization, property is assessed by elective township assessors, under the supervision of the county treasurer. In the counties which do not have township organization, the county treasurer is *ex officio* assessor, with power to appoint the necessary number of deputy assessors. Cook county now has a single elective county assessor heading its assessing organization.¹³ In St. Clair county, there is an elective board of assessors composed of five members. In the smaller townships, the township assessors are paid on a per diem basis. In townships of over 15,000 inhabitants, they are paid salaries. In the case of counties without township organization, the county treasurer is on a salary basis, although he does not, of course, devote all of his time to the task of assessment. Real property is assessed quadrennially.

In counties without township organization, the board of county commissioners acts as the board of review. In the counties with township organization, the chairman of the county board of supervisors serves as chairman of the board of review, two other members being appointed by the county judge. In St. Clair county, three members are elected for six year terms. Cook county now has a board of appeals consisting of two elective members, elected by popular vote for terms of four years.¹⁴ The state equalization is made by the State Tax Commission. It is confined to adjustments by classes of property as amongst the counties.

STATE SUPERVISION · POTENTIAL.—The State Tax Commission is composed of three members appointed by the Governor for varying terms of office. Its statutory powers with respect to state supervision and control over assessments are moderately extensive. It has general supervisory powers over the local officials. It is its duty to confer with, advise and assist them, and to prescribe general rules and regulations for their governance. It may hold conferences with them, and has the customary powers and duties with respect to forms and reports. Although it is not given the power of removal specifically, it may institute proceedings for

¹² *Ibid.*, p 132

¹³ The former board of five assessors was abolished by Laws, First Special Session, 1931-1932, S. B. No 14, Approved February 13, 1932

¹⁴ Laws, First Special Session, 1931-1932, S. B. 14. Effective February 13, 1932. This law provided that the first members be appointed by the Governor of the state and the President of the county board, to serve until December 1935, after which date they were to be elected by popular vote for terms of four years

the enforcement of the law in cases where the local officials have failed or neglected to comply with it. It is authorized to order the local assessors to reassess, but it is not empowered to make a reassessment with its own appointed agents.¹⁵

STATE SUPERVISION: ACTUAL.—Until recently, the activities of the Illinois Tax Commission with respect to assessments were slight. Beginning with 1926, however, largely as a result of complaints by Farm Bureaus, four counties were ordered to be reassessed. In the following year, two other counties were ordered to be reassessed, and the case of one of those which had been ordered in 1926, continued. In 1928, reassessment proceedings were continued in two of the 1927 cases; and three other counties were ordered to be reassessed, amongst them Cook county, including the city of Chicago. In 1929, the Tax Commission definitized its new viewpoint toward supervision and control, made a lengthy report on its reassessment activities; and outlined energetic future policies (in its Tenth Annual Report). This enthusiasm apparently diminished with the introduction of legal and financial complications of the Cook county reassessment and other tax problems. In 1933, however, a manual for the instruction of assessors was issued. At the present time, Prof. Simeon E. Leland, the well-known tax expert and consultant, is a member of the Illinois Tax Commission, and the writer has been advised that the commission is now engaged in a revision of the Constitution and the Statutes in order to strengthen its control over property tax administration.¹⁶

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*.—The investigations of assessments made by Prof. Herbert D. Simpson in Illinois are not only of the highest type of technical excellence, but also enjoy the rather unusual distinction of having had a practical effect in bringing about actual reform. Prof. Simpson has made elaborate studies of assessment inequality in the state as a whole and in the city of Chicago.¹⁷

From data on conveyances collected and collated by Dr. John C. Watson of the Illinois Agricultural Association covering eighty-three counties, and similar data recorded by the Chicago and North Western Railway Company covering twenty-two counties, Prof. Simpson selected 2,049 representative sales, as of 1927, in ten counties, in order to obtain a sample for the assessment situation outside of Cook county. The assessment ratio for each property was calculated, the ratios classified, and the results presented in tabular form as show in Table XLV.

¹⁵ Cahills' Illinois Revised Statutes, 1933, ch. 120, secs. 107, 108, 117, 118.

¹⁶ Based on recent reports of the Illinois Tax Commission, and letter from Mr. Scott W. Lucas, Chairman of the Illinois Tax Commission, under date of July 17, 1934.

¹⁷ H. D. Simpson, *The Tax Situation in Illinois*, The Institute for Research in Land Economics and Public Utilities, Studies in Public Finance, Research Monograph No. 1, 1929; H. D. Simpson, *Tax Raquet and Tax Reform in Chicago*, 1930.

TABLE XLV

DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS IN ILLINOIS, 1927,
BY CITIES, TOWNS AND VILLAGES, AND RURAL AREAS *

ASSESSMENT RATIO	NUMBER OF PROPERTIES		
	Cities ^b	Towns and villages ^c	Rural areas
1-5	4	10	
6-10	30	35	2
11-15	60	67	8
16-20	138	93	15
21-25	117	80	19
26-30	110	72	30
31-35	95	75	41
36-40	71	54	53
41-45	59	43	29
46-50	47	30	29
51-55	39	34	18
56-60	41	29	24
61-65	20	20	16
66-70	29	19	23
71-75	16	14	15
76-80	20	17	8
81-85	4	3	12
86-90	7	11	7
91-95	5	4	4
96-100	5	4	8
Over 100	19	22	16
Total.	936	736	377

* Source: H. D. Simpson, *The Tax Situation in Illinois*, The Institute for Research in Land Economics and Public Utilities, Studies in Public Finance, Research Monograph No. 1, 1929, p. 33.

^b 5,000 and more population

^c Less than 5,000 population.

Prof. Richard T. Ely in the introduction to this study stated, "We in Illinois perhaps have the unenviable distinction of having the worst assessment of real property in the United States" ¹⁸ Certainly it is one of the worst. The average assessment ratio for the ten counties was exceedingly low, 34.1 per cent, while the coefficient of dispersion, the statistical index of inequality, was extremely high, 51.6 per cent. These are average figures. Throughout the various counties, the assessment ratio varied from less than 5 per cent to over 100 per cent.

Inter-County Inequality.—In addition to this extensive inter-property inequality, a very substantial amount of variation as amongst the average county ratios was revealed. These figures were as shown in Table XLVI.

¹⁸ H. D. Simpson, *The Tax Situation in Illinois*. Introduction by R. T. Ely.

TABLE XLVI

AVERAGE ASSESSMENT RATIOS OF SAMPLE COUNTIES IN ILLINOIS,
1927^a

COUNTY	Number of properties	Average assessment ratio
Alexander	157	50.9
Boone	14	43.8
Bureau	34	35.0
DeKalb	49	38.8
Lake	141	24.6
LaSalle	332	35.8
Marshall	27	45.7
St. Clair	859	31.9
Tazewell	54	36.2
Williamson	332	38.2
Total and average	2,049	34.1

^a Source: H. D. Simpson, *op cit*, p. 24.

Whereas the average assessment ratio in Lake county was 24.6 per cent, the ratio of Alexander county was 50.9, or more than double. Such inter-county inequality combined with the extensive inter-property inequality described above results in very inequitable levy of the state property tax.

Regressivity.—In addition to the evils already described, it was found that there was a pronounced although slightly irregular tendency for the assessment ratio to decrease as the value of the property increased. This tendency toward regressivity was revealed by a classification of the data as shown in Table XLVII.

TABLE XLVII

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN ILLINOIS,
1927^a

VALUE OF PROPERTY	Number of properties	Average assessment ratio
<i>Urban and Village</i>		
\$0-\$1,000...	548	44.6
1,000-2,500	519	36.4
2,500-5,000	381	30.0
5,000-10,000	178	26.8
10,000-20,000	43	27.4
20,000 and over...	23	25.0
Total and average	1,672	20.7
<i>Rural</i>		
\$0-\$5,000.	223	49.2
5,000-10,000	60	52.1
10,000-20,000	43	47.3
20,000 and over.	40	34.9
Total and average	377	41.9

^a Source: Simpson, *op cit*, pp. 36 and 38.

Urban properties of less than \$1,000 value were assessed on the average at 44.6 per cent, while more valuable properties were assessed at steadily and fairly regularly lower ratios, with properties worth \$20,000 and over assessed at only 25 per cent. The same tendency was found to exist in the case of the rural properties, although neither so markedly nor regularly. Properties worth less than \$5,000 were assessed at 49.2 per cent, whereas those worth \$20,000 and more were assessed on the average at only 34.9 per cent. Here again we find evidence that the present system of real property tax administration is resulting in a regressive application of the tax.

Chicago.—An elaborate and thorough investigation of assessment inequality in the city of Chicago was made by Professor Simpson. In one section of it, 6,017 transfers, as of 1927, were compared with their assessed valuations and classified. The results were as shown in Table XLVIII.

TABLE XLVIII

DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN CHICAGO, 1927 ^a

ASSESSMENT RATIO	Number of properties
1- 5	56
6- 10	162
11- 15	263
16- 20	454
21- 25	692
26- 30	938
31- 35	863
36- 40	723
41- 45	524
46- 50	368
51- 55	259
56- 60	161
61- 65	162
66- 70	92
71- 75	74
76- 80	60
81- 85	50
86- 90	38
91- 95	28
96-100	17
101 and over	33
Total	6,017

^a Source: H. D. Simpson, *Tax Racket and Tax Reform in Chicago*, 1930, p. 57.

Again glaring inequalities were revealed, the ratios ranging from less than 5 per cent to over 100 per cent. The average ratio was 35.9 per cent; the coefficient of dispersion, 36.5 per cent.

An interesting classification, according to type of property, was made. The results were as shown in Table XLIX.

TABLE XLIX

VARIATIONS OF AVERAGE ASSESSMENT RATIOS OF SPECIFIED CLASSES OF PROPERTY IN CHICAGO, 1927 ^a

TYPE OF BUILDING	Number of properties	Average assessment ratio
Office and bank	22	56.7
Hotels, theatres and amusements	31	33.1
Industrial	129	43.8
Commercial, retail and wholesale	451	39.0
Miscellaneous	254	35.3
Apartment	1,581	34.9
Combined business and residence	564	34.7
Vacant land	842	35.2
Duplex and two flats	848	33.1
Single family residence	1,295	32.6

^a Source. H. D. Simpson, *Tax "Racket" and Tax Reform in Chicago*, 1930, p. 71

Office and bank buildings were assessed at an average ratio of 56.7 per cent, single family residences at 32.6 per cent; industrial properties at 39.0 per cent. These differentials are much greater than they appear, because of the fractional basis of assessment. They signify really glaring inter-class inequality.

After the expert reassessment of the city of Chicago, which this investigation was instrumental in bringing about, a comparative ratio test of sales values and assessed values showed quite different results. The coefficient of dispersion of 1927, 36.5 per cent, was almost cut in half, the coefficient of dispersion after the reassessment being computed as 20 per cent; and the differentials as amongst the different classes of property were greatly reduced.

Summary.—Although assessments have been greatly improved in Chicago, the greater part of the state is still very poorly assessed, and even in Chicago there is still plenty of room for further improvement.

Michigan

ASSESSMENT, REVIEW AND EQUALIZATION—The township supervisor, the chief administrative officer of Michigan townships, is assessor *ex officio* in this state. Cities may have either boards of ward supervisors or a full-time assessor. Real property is assessed annually. Assessments are reviewed by a township board composed of the supervisor, and two other persons elected by popular vote. This board hears complaints of taxpayers, with power to make adjustments on its own motion. There is also a county equalization, made by the county board of supervisors. The decisions of the county board may be contested by appealing to the State Tax Commission. The state equalization is made by a mixed board, partly *ex officio* and partly full-time, its members being the Auditor-General, the Commissioner of Agriculture and the three

members of the State Tax Commission. The latter prepare the data for this equalization. Its scope is limited by statute to county aggregates. In the case of appeals brought by municipalities against the decisions of the county boards of equalization, the Tax Commission may order the county boards to reconvene in order to make the recommended changes.

STATE SUPERVISION: POTENTIAL.—The present title of the administrative head of the tax system of the state is the State Tax Commission. (The State Board of Tax Commissioners was superseded in 1925 by the State Tax Department, and the latter by the present organization, the State Tax Commission, in 1927).¹⁹ It is composed of three members appointed by the Governor for terms of office of six years. Its statutory authority with respect to supervision and control over assessments is extensive. Its powers and duties include general supervision; advice and conference; forms and reports; and the investigation of alleged improper or unequal assessments. It is empowered to order reassessments, and to make the same with its own appointed agents. It may prefer charges with the Governor against assessing officers who have violated the law, or who have failed in the performance of their duties.²⁰

STATE SUPERVISION: ACTUAL.—State supervision and control, although once very vigorous, is limited at the present time in Michigan. During the second decade of the present century, the reassessment power was constantly invoked, the whole state being covered during the period. In 1921, the time period of the state equalization was changed from twice in five years to annual, and the policy of reassessment became secondary to the equalization activities of the State Board of Tax Commissioners. The early organization for these equalization activities was at first elaborate. The state was divided into seven districts, each in charge of a foreman, each foreman being assisted by a staff of from three to five men. Special examiners were provided for special types of properties.²¹ This elaborate organization was subsequently cut down by the legislature, and in recent years the state has not pursued a vigorous policy with respect to either reassessment, equalization or supervision. In its report for the years 1931-1932, the State Tax Commission commented on the flood of individual appeals which was taking up most of its time.²² The case of Michigan is an outstanding example of the diminution, in recent years, of state supervision and control over local assessment.

RECENT ASSESSMENT CONDITIONS.—R. Wayne Newton and W. O. Hedrick, in one of the best studies of the field investigation type,

¹⁹ Laws of 1925, Act 155, and Laws of 1927, Act 360.

²⁰ Michigan Compiled Laws, 1929, secs. 3545, 3547, 3706-3713.

²¹ *Report of the Board of State Tax Commissioners and State Board of Assessors, 1921-1922*, pp. 7-8

²² *Report, 1931-1932*, p. 7.

have made a thorough study of assessment conditions in Michigan.²³ Personal visits were made in eleven of the counties, these eleven counties being selected as a representative sample for the state. Below is a summary of their principal findings.

Assessing Work Crowded Out by Other Duties.—The assessor was found to be heavily burdened with other duties and unable to give the time necessary for the proper performance of the task. "Besides being the assessing officer of his township, the supervisor is a member of the township board, and of the county board of supervisors. He is also president of the township board of health. In addition to these duties of a comprehensive nature, the supervisor is required to perform a multitude of minor services. He is agent of the township and as such must bring or defend all legal actions concerning it. He is in charge of the township records and is required to provide certified copies of these records on request, for a nominal fee . . . He must settle disputes between the road commissioner and persons interested in road improvements. The supervisor has general oversight over the poor, as well as over delinquent children . . . Many of his duties fall within a very short period of time. The assessment roll must be completed in a period of about fifty working days immediately after his election, in addition to any other work that may fall upon him during that period by virtue of his office."²⁴

Condition of Tax Rolls.—Tax rolls were found to be in bad, and even illegal condition. "One township roll for 1926 contained a total of thirty-eight errors in the description of parcels of rural lands of ten or more acres, each of them sufficiently serious to invalidate the tax, if protested. Twenty tracts were not listed at all . . . *State and county officers united in expressing the belief that there were thousands of farms incorrectly described for taxes*"²⁵ Another aspect of the faulty conditions of the rolls was the misspelling of owners' names and the failure to keep the assessment up-to-date with respect to changes of ownership. "In many instances names are so misspelled as to be practically unrecognizable, particularly in the case of owners of Scandinavian or Slavic descent. Perhaps a more frequent occurrence is the failure to show the name of the present owner . . . Failure to assess property to the owner under his correct name leads to unnecessary bother to collecting officers and others who have occasion to consult the tax rolls."²⁶

Roll Copying.—The practice of copying the prior year's assessment figures regardless of differential changes in property values was found to be very prevalent. "Inspection of assessment rolls

²³ R. Wayne Newton and W. O. Hedrick, *Farm Real Estate Practices in Michigan*, Michigan Agricultural Experiment Station Special Bulletin No. 172, Feb. 1928.

²⁴ Newton and Hedrick, *op. cit.*, p. 17.

²⁵ *Ibid.*, p. 18. Italics by Newton and Hedrick.

²⁶ *Ibid.*, pp. 21-22.

in townships scattered widely over the state shows that much property remains at the same figure year after year, regardless of the requirement of annual reassessments, and regardless of changes in the assessing officers.²⁷

Lack of Uniformity of Method.—Where the township supervisor took a more active part in determining assessments than merely copying former rolls, a marked lack of uniformity of method was discovered. "Supervisors hold widely varying opinions as to the proper method of determining the valuation at which real estate should be assessed. Some supervisors asserted that they took the earning capacity of the farms into consideration. If the owner was known to be making money the farm was assessed higher than it otherwise would be. One supervisor stated that his predecessors had overassessed the holdings of non-residents, and that he had lowered some of these. While he considered some of these to be too high even now, he believed it impossible to lower them further without creating dissatisfaction locally . . . Still another assessor stated a rule which from the foregoing discussion of assessments would seem to be the true cornerstone of assessment practice in many localities. He said, 'As long as the taxpayer is satisfied, I'm satisfied'."²⁸

Inadequacy of Equalization and Supervision.—Little relief from these deplorable practices was found to have been achieved through county or state equalization.²⁹ As for supervision and control upon the part of the Tax Commission, the writers state: "Most of its accomplishments along this line must result from persuasion rather than force and the evidence previously shown does not indicate that this persuasion has been particularly effective with regard to some of the long standing sources of complaint."³⁰

Summary.—The results of the investigation are summarized in the following words: "Tax rolls are prepared by personally capable township officials who are elected to office annually on the eve of taking the assessment, and who make frequent errors in the listing of property, many of which are directly traceable to the short time in which the rolls must be completed, and to the multiplicity of other duties both public and private, which naturally fall upon a part-time officer exercising a wide variety of powers. In the valuation of property, these officers are, by necessity, more amenable to the desires of their constituents than to the wishes of their superior officers, who have no voice in their selection, and practically none in their retention of office. The basis of assessment varies so greatly between local assessing districts that prop-

²⁷ *Ibid.*, p. 23.

²⁸ *Ibid.*, pp. 24-25.

²⁹ *Ibid.*, pp. 28-31.

³⁰ *Ibid.*, p. 36.

erty assessed at \$17,000 in one district will pay no more state tax than property in another district assessed at only \$7,000.

"Equalizations, designed to correct differences in the rate of assessed valuation to true cash value of property as between one taxing district and another fail to reach their objective. There is no way in which equalizing boards can do even-handed justice to the taxpayers in the district affected so long as present methods are used.

"The State Tax Commission has been operating under laws which, as a former chairman of the commission has said 'do not simply confer authority to do so and so, but they require the commission to do so and so.' Yet abundant evidence has been presented to show that many of these provisions have not been carried out, due, in most cases, to the fact that the positive duty of the commission, in point of law, is utterly impossible of performance.

"As a result of these conditions injustice is widely prevalent among the taxpayers of Michigan."³¹

Wisconsin

ASSESSMENT, REVIEW AND EQUALIZATION—Wisconsin is the leading state in the country with respect to state supervision and control over local assessments; it is largely in the supervisory organization provided that its assessment organization differs from that found in other states. Assessments are made annually by township and village assessors, who are elected annually by popular vote, one for each township and village. They are compensated for their work on a per diem basis. Cities have their own assessors, sometimes elected by popular vote, sometimes appointed by the mayor or council. Assessments are reviewed by the board of supervisors and clerk in the towns; the president, clerk, and such other officer or officers (the assessor is not eligible) as the board of trustees determines in the villages; and the mayor, clerk, and such other officer or officers (assessors are not eligible) as the common council determines in the cities. County equalization is by statute entrusted to the county board of supervisors, which has the power to make adjustments both on complaint of taxpayers and on its own motion. In actual practice, however, the county equalizations made by the direct representatives of the State Tax Commission, the Supervisors of Assessments, are usually adopted by the county boards. These equalization tables are prepared by the Supervisors of Assessments for the purpose of apportioning the State levy on property. However, the county supervisors have come to realize the desirability of non-political equalization based upon objective facts. In 1931 more than sixty of the 71 counties accepted the values set by the representatives of the Tax Commission.³²

³¹ *Ibid.*, p. 45.

³² H. M. Groves. "Property Tax Institutions in Wisconsin," *Bulletin of the National Tax Association*, Dec. 1933. p. 77.

The Supervisors of Assessments are technically competent specialists in property tax work. They are appointed by the State Tax Commission, and may be transferred from one district to another. They need not be residents of the district assigned to them although the law states that preference should be given to residents in making appointments.³³ The State Tax Commission, which operates chiefly through its supervisors in the matter of assessment, makes the state equalization. This equalization does not extend to individual properties, although the Tax Commission may make individual changes if complaint is made to it.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members appointed by the Governor with the advice and consent of the Senate for terms of eight years. Insofar as the statutes are concerned, its powers with respect to state supervision and control are not very different from those of most tax commissioners. It has general supervision over the local assessment and equalization, and may confer with, advise and direct the local officials. It may make visits and investigations of their work and methods; may examine into cases where evasion or violation of the laws are alleged; and may institute proceedings in the courts for the enforcement of the law and the removal of local officers for official misconduct or neglect of duty. The Supervisors of Assessment, through whom most of these powers are exercised, are required to call annual meetings of the local assessors, and the Tax Commission is required to call annual meetings of the supervisors. The Tax Commission is not empowered to order or make reassessments on its own motion. It is authorized, however, to make reassessments upon complaint by the owners of at least 5 per cent of the total assessed valuation of the property in the district.³⁴

STATE SUPERVISION: ACTUAL.—As has already been stated, Wisconsin has developed the system of state stimulation and supervision in the matter of assessments to the highest degree found in the country. Most of this work is carried on by the technically

³³ Wisconsin Statutes, 1933, 73.07. From 1901 until 1911, the Supervisor of Assessments, modeled after the Indiana County Assessor, was an elective county official. In 1911, when the state income tax was inaugurated, the state was divided up into districts, and the appointive district administrator of the income tax was also given the duty of supervising the local assessment, the elective county supervisor being abolished. During recent years, there have been two trends of development: (a) The districts have been enlarged in area, and their number reduced from about forty to ten, (b) administration of the income tax and supervision of local assessments have been segregated. In practice, this separation between income and property tax administration is now nearly complete. At the present time, complete separation of income and property tax administration obtains in eight of the ten districts. The present law (by Laws of 1933, ch. 222) provides that there be both an assessor of income and a supervisor of assessments for each district, but that in the interest of economy and efficiency, one person may be appointed to perform both functions.

³⁴ Wisconsin Statutes, 1933, 70.75, 73.01, 73.03, 73.05.

competent, civil-service, state-appointed supervisors of assessors (and their assistants). The supervisor holds a meeting in each county of his district prior to the commencement of the work, at which the local assessors are given a short course in assessing. The supervisor also spends some time in the field during the assessing period, guiding, advising and assisting the local assessors. It is through the supervisors, also, that most of the work for the state equalization is accomplished.³⁵

RECENT ASSESSMENT CONDITIONS.—*The Nelson-Mitchell Investigation.*—Wisconsin was one of the five mid-western states investigated in the able study of assessment inequality made by Dr. R. W. Nelson and G. W. Mitchell.³⁶ In the ratio test made for Wisconsin, sales prices of some 1,256 properties were used, 598 of which were of urban properties of three cities; 176, of properties situated in eleven villages, and 482, of rural properties of twelve counties (of southern and central Wisconsin). The records, which were as of 1927, were obtained from the files of the Wisconsin Tax Commission.

Individual Inequality.—*Rural-Urban Inequality.*—The least unsatisfactory showing was made by the rural properties. The average coefficient of dispersion for the rural properties was 16.35 per cent. The village properties made a poorer showing, with an average coefficient of dispersion of 18.91 per cent. The three cities, Oshkosh, Eau Claire and Racine were assessed most unsatisfactorily, the average coefficient of dispersion being 25.12 per cent. There was inequality, also, as amongst these three types of property, the average assessment ratio of the rural properties being 92.43 per cent, of the village properties, 83.05 per cent; and of the city properties, 72.48 per cent.

Inter-County Inequality.—With respect to inter-county inequality rural properties in Richland county were assessed at an average ratio of 80.73 per cent, those of Waushara county, at an average ratio of 117.26 per cent. The next to the highest ratio was that for La Fayette county, 99.97 per cent; the next to the lowest ratio, 84.64 per cent, for Columbia county. Table L shows the figures in detail.

Variations as Amongst County Coefficients of Dispersion.—More important than the variations as amongst the average county assessment ratios were the variations as amongst the county coefficients of dispersion. These figures also are shown in Table L. La Fayette was very well assessed, with a coefficient of dispersion of only 8.08 per cent, Dane, poorly assessed with a coefficient

³⁵ For more detail, see Part III, p. 221 on the Wisconsin system of equalization; p. 223 on the Wisconsin system of supervision; p. 225 on the Wisconsin system of land classification.

³⁶ R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and Other Mid-Western States*, 1931, chap. iii.

of 25.06 per cent. Between these extremes, some counties, such as Richland and Jefferson, were assessed fairly well, others, such as Rock and Columbia, poorly. As for the other counties, the quality of assessment ranged about an average which may be characterized as fair or mediocre. Apparently the system does not result in uniformly good assessing, but "spottiness" and unevenness.

TABLE L
AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION
IN SAMPLE WISCONSIN COUNTIES, 1927^a

COUNTY	Number of properties	Average assessment ratio	Coefficients of dispersion
Columbia	55	84.04	23.44
Dane	50	91.04	25.06
Green	35	96.71	12.97
Green Lake	27	93.74	12.67
Jefferson	23	92.13	11.06
Juneau	29	90.59	16.30
La Fayette	33	99.97	8.08
Richland	22	80.73	11.00
Rock	50	87.80	23.69
Sauk	46	88.54	14.17
Vernon	72	86.06	17.02
Waushara	34	117.26	20.12

^a Source: R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and Other Mid-Western States*, Iowa University Commerce College, Business Research Bureau, Iowa Studies in Business No. 10, January 1931, p. 70.

Regressivity.—With respect to regressivity, the test met with slightly better results than when applied in most states, but these results were still unsatisfactory.³⁷ Regressivity (tested by a classification according to the value per acre) was found to exist in most of the counties and (tested by value of property) in the three cities.³⁷

The United States Forest Taxation Inquiry Study.—The investigation of Wisconsin conditions made in the Nelson-Mitchell study was largely confined to the southern and central portions of the state. In an investigation conducted by R. C. Hall, under the supervision of Prof. Fred R. Fairchild, for the United States Forest Taxation Inquiry, the northern counties of the state were selected for study.³⁸ Some 11,327 transfers, of the three years 1925, 1926 and 1927, were utilized, the data being obtained from the files of the Wisconsin Tax Commission.

³⁷ *Ibid.*, pp. 78-81.

³⁸ The seventeen northern counties of the state where less than 40 per cent of the land area is in farms; Richland, a southern county where farm woodlots are important; and Shawano, where neither forest nor farm interests predominate over the other, were investigated in this study. R. C. Hall, "Assessment Ratios of Forest Property and Other Real Estate in Wisconsin," *Progress Report of the Forest Taxation Inquiry No. 12*, November 15, 1930.

Inter-Class Inequality.—One of the primary purposes of this study, and one which is of interest in the present connection, was to learn whether forest and cut-over lands were being favored or discriminated against as compared with farm lands and other types of property. The results of a classification of the data by types of property are presented in Table LI.

TABLE LI
AVERAGE ASSESSMENT RATIOS OF VARIOUS TYPES OF PROPERTY
IN WISCONSIN, 1925-1927 ^a

TYPE OF PROPERTY	Number of properties	Average assessment ratio ^b
TOWN		
Farm	1,419	70
Cut-over	2,391	103
Timber..	119	46
Resort	1,649	50
Residential and business.	867	56
Unclassified	1,087	63
Average (total town except unclassified)	6,445	68
VILLAGE	805	75
CITY	2,900	76
Average (total all real estate)	11,327	71

^a Source. R. C. Hall, "Assessment Ratios of Forest Property and Other Real Estate in Wisconsin," *Progress Report of the Forest Taxation Inquiry No. 12*, November 15, 1930, p. 4 and Table 1

^b Three year average, 1925-1927 inclusive

The average assessment ratio for all properties was 71 per cent. Cut-over land was relatively markedly overassessed with an average ratio of 103 per cent. On the other hand, timber land was very considerably underassessed with an average ratio of 46 per cent. City and village properties were relatively overassessed as compared with the average of all properties (71 per cent), with ratios of 76 and 75, respectively. Resort properties and residential and business properties in the towns were relatively underassessed with ratios of 50 and 56, respectively.

Inequality Within Classes and Counties.—An intensive study of inequality was made in six of these counties, namely, the three with the largest number of cut-over land sales and the three with the largest number of timber sales. Some 2,659 transfers were used for this purpose. When the properties were classified according to various main types, the results were as shown in Table LII.

The general results with respect to inter-class inequality were similar to those of the test made for the larger sample, cut-over land being assessed at the highest average ratio; resort and timber property at the lowest average ratio; and residential and business, and farm property, intermediate. As for the degree of inequality

TABLE LII

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION
IN SAMPLE WISCONSIN COUNTIES, 1925-1927^a

CLASS OF PROPERTY AND COUNTY	Number of properties	Average assessment ratio ^b	Coefficient of dis- persion ^c
FARM			
Forest	22	50	20
Langlade	85	68	21
Lincoln	129	57	25
Marinette	117	56	34
Price	144	76	25
Taylor	230	87	19
Total and averages ^g	727	66	29
CUT-OVER^d			
Forest	90	82	27
Langlade	144	123	49
Lincoln	156	84	25
Marinette	238	88	43
Price	347	112	29
Taylor	309	114	21
Total and averages ^g	1,284	100	36
TIMBER			
Forest	29	39	28
Langlade	14	53	17
Lincoln	14	55	13
Marinette	9	71	18
Price	7	84	12
Taylor	7	84	12
Total and averages ^g	73	60	18
RESORT^e			
Forest	39	45	34
Langlade	75	47	42
Lincoln	133	52	36
Marinette	19	60	33
Price	11	85	22
Taylor	1	50	..
Total and averages ^g	278	56	33
RESIDENTIAL AND BUSINESS^f			
Forest	76	42	37
Langlade	43	47	44
Lincoln	37	52	30
Marinette	40	50	39
Price	43	87	29
Taylor	58	83	25
Total and averages ^g	297	61	34
ALL PROPERTIES			
Forest	250	43	32
Langlade	361	69	36
Lincoln	469	61	30
Marinette	414	66	43
Price	554	92	30
Taylor	605	96	22
Total and averages ^g	2,659	71	32

^a Source: Hall, *op. cit.*, Table 19^b Weighted by consideration.^c Weighted by consideration.^d Without merchantable timber.^e Forest or farm property which because of location on lakes or streams or other features has recreational value.^f Outside of villages and cities.^g Unweighted arithmetic averages, computed by the writer.

within each class, cut-over land was assessed worst, with a coefficient of dispersion varying from 21 per cent in Taylor county to 49 per cent in Langlade, the average for the six counties being 36 per cent. Timber land, at the other extreme, was assessed least inequitably with an average coefficient of dispersion of 18 per cent. Substantial inequality was revealed for the farm properties, by an average coefficient of dispersion of 29 per cent; for the resort properties, by an average coefficient of 33 per cent, and for the residential and business properties, by a coefficient of 34 per cent. These coefficients are computed on the basis of the standard deviation rather than the average deviation (the index of variation from uniformity used throughout this report). Hence, in order to make these figures comparable, the above coefficients must be reduced by about 20 per cent, the average deviation being normally .7979 of the standard deviation. Thus, the average coefficient of dispersion for the farm properties of the six northern counties was approximately 26 per cent, as compared with approximately 16 per cent for the rural properties of the twelve southern and central counties of the Nelson-Mitchell study.

Summary.—The results of the two studies point to the following conclusions. The average situation with respect to assessment inequality in the southern and central counties is tolerably satisfactory, although there are many variations, with certain counties well assessed and others very poorly assessed. The situation with respect to the northern counties is not nearly so satisfactory, there being very substantial inequality on the average. In the cities, if the three cities selected are representative, the function is far from being well performed. Although Wisconsin is one of the better assessed states of the Nation, it cannot be said that present methods have produced satisfactory results. The most that can be said is that the policy of vigorous state supervision has achieved satisfactory results in some of the counties.

CHAPTER VIII

THE WEST NORTH CENTRAL STATES

Minnesota

ASSESSMENT, REVIEW AND EQUALIZATION—The township unit of assessment, which is quite common in the states of the North Central section of the country, is the geographical administrative unit of assessment in Minnesota. Cities have their own assessment organizations. Rural properties are assessed by township and village assessors, elected by popular vote for terms of two years. A unique statutory provision in this state is the stipulation that urban assessments be made at a higher legal ratio than rural. The former is 40 per cent; the latter, 33½ per cent. Moreover, by Laws of 1933, ch. 359, it was provided that the first \$4,000 of unplatted (rural) real estate used for homesteads be assessed at 20 per cent, and the first \$4,000 of platted (urban) real estate, at 25 per cent.

There is both a local review and a county equalization. The former is made by the town board of each town; the assessor, clerk and president of each village; and the assessor, clerk and mayor of each city. The county equalization is made by the county commissioners and the county auditor. All of these local boards have the power to make adjustments upon their own motion, as well as upon complaint of taxpayers or taxing units. Appeals from their decisions may be taken to the Tax Commission, which also makes the state equalization. This equalization is extensive in statutory scope, including adjustments as amongst individual properties as well as of subdivisions of counties, and counties.

STATE SUPERVISION: POTENTIAL—The Minnesota Tax Commission is composed of three members appointed by the Governor with the confirmation of the Senate for terms of six years. Its statutory powers and duties with respect to state supervision and control over local assessments are extensive. Besides general supervisory powers and duties, advice and instruction, and forms and reports, the Tax Commission is required to visit at least one-half of the counties annually (and every county at least once in two years) for purposes of investigation. It is its duty to call meetings of the local assessors to be held at the county seat. It is directed to examine into cases where omission, fraud, inequality or other impropriety is alleged, and to institute proper remedial proceedings. It may institute proceedings against assessors for removal from office for misconduct or negligence of duty, by preferring charges to the Governor. It has the power to make reassessments with persons designated by itself in the event that it deems the assessment of a locality unsatisfactory.¹

¹ Mason's Minnesota Statutes, 1927, secs. 2364, 2365, 2370.

STATE SUPERVISION: ACTUAL.—The North Central section of the country includes a number of states where state supervision and control over local assessments is quite vigorous. The Minnesota Tax Commission is one of the most active in this respect. It regularly holds meetings in the various counties of the state, issues an up-to-date assessment manual, and keeps in constant touch with the assessors by means of correspondence. In 1928, it made the use of modern appraisal cards mandatory. It exerts influence on the local boards of review and the county boards of equalization to the end that they should make a conscientious effort at correction of errors and inequalities. It has a field staff for obtaining equalization data, and is reputed to have a state equalization of an objective, non-political character. It has designed model assessment maps and has a special representative who spends considerable time with assessors in the field, as well as an engineer who assists on difficult "problem" properties. During the biennium 1926-1928, thirty-seven special assessments of real property were ordered. Since 1928, the number of reassessments of real property has been as follows: 1929, 8; 1930, 3; 1931, 4; 1932, 3; 1933, 2. The power of removal has been very rarely exercised.²

RECENT ASSESSMENT CONDITIONS: RURAL.—*The Clarke-Jesness Investigation.*—An excellent ratio study of assessment inequality is that of the assessment situation in Minnesota made by Prof. G. B. Clarke and O. B. Jesness.³ The state was divided into six districts: The southeastern corner of Minnesota, which has been settled for the longest time and has the largest population, designated as District I; the southwestern corner, the corn and hog section of the state and the best agricultural area, with level land and rich soil, District II; the west-central section, containing rougher and more wooded land and devoted to more diversified farming than District II, designated as District III; the east central section, containing many lakes and devoted to small grain farms, potatoes and dairying, District IV; the northwestern area, including the Red River Valley wheat and potato farms, District V; and the northeastern cut-over region including the Iron Range, District VI. The time period was carefully selected, the years 1924-1927 being chosen in order to eliminate as much as possible the worst of the post-war deflation of farm values. The size of the sample was substantial, consisting of 3,655 transfers for the rural properties. The sales records were trustworthy, being obtained from the files of the Minnesota

² Data from R. W. Nelson and G. W. Mitchell, *op. cit.*, chap. iv; R. G. Blakey, *Report on Taxation in West Virginia*, 1932, pp 186-188; Biennial Reports of the State Tax Commission of Minnesota; and letters from Mr. Harry E. Boyle, Commissioner, Minnesota Tax Commission, under dates of June 14, 1934, and August 23, 1934.

³ G. B. Clarke and O. B. Jesness, *A Study of Taxation in Minnesota with Particular Reference to Assessments of Farm Lands*, Minnesota Agricultural Experiment Station Bulletin 277, Aug 1931.

Tax Commission. Since assessments of rural real property were made at the time selected for the test on a straight 33 $\frac{1}{3}$ per cent legal basis, the assessed valuations were first multiplied by three before comparing them with the sales prices. The resulting assessment ratios were classified by districts, and the average assessment ratio and average coefficient of dispersion computed as shown in Table LIII.

TABLE LIII

AVERAGE ASSESSMENT RATIOS, RANGES, AND COEFFICIENTS OF DISPERSION OF SAMPLE RURAL PROPERTIES IN MINNESOTA 1924-1927, BY DISTRICTS ^a

DISTRICT	Number of farms	Average assessment ratio	Range	Coefficient of variation (σ/M)	Coefficient of dispersion (AD/M) ^b
I	577	92.3	25-205	27.83	22.26
II	1,100	89.1	25-195	24.76	19.81
III	543	90.3	35-195	29.69	23.75
IV	703	80.6	15-205	39.98	31.98
V	386	89.7	15-195	37.97	30.38
VI	346	84.1	15-205	45.29	36.33

^a Source, G. B. Clarke and O. B. Jesness, *A Study of Taxation in Minnesota with Particular Reference to Assessments of Farm Lands*, Minnesota Agricultural Experiment Station Bulletin 277, Aug. 1931, p. 14.

^b Coefficient of dispersion based on the average deviation. Obtained by multiplying the coefficient of variation by 8.

The last column in Table LIII has been added by the writer in order to make the results of the investigation comparable with those found in other states. The least unsatisfactory assessments were made in the older southern districts, District II making the best showing with a coefficient of dispersion of 19.81 per cent. The investigators explain this by observing that estimates of land values can more easily be made in regions which have been developed for a long time, and where the agricultural possibilities are well-known, than where much of the land is not cultivated and its value more conjectural.

The differences in assessment efficiency throughout the state were very much greater, and very much more important than the differences in the average district ratios. The average assessment ratio of District VI was lowest, 84.1 per cent; the highest district ratio, that of District I, was 92.3 per cent. At the extremes, there was a difference of only a few points. On the other hand, the coefficient of dispersion of District VI was almost twice as high as that of District II, and the differences between the other district coefficients within these extremes were also considerable. Moreover, the existence of very poor assessing in some parts of the state is very much more harmful than the existence of slight variations in the average assessment ratios.

The Nelson-Mitchell Investigation.—Considering differences in base year selected, and in the size and character of the sample, the results of another test of assessment inequality, made by Nelson and Mitchell (in the study to which reference has already been made) are as similar as one could expect. The time period selected in the Nelson-Mitchell study was 1926-1927, sales values and assessed values of 295 properties in six counties (most of them southern and central), constituted the sample. The results were as shown in Table LIV.

TABLE LIV
AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION
OF RURAL PROPERTIES IN SAMPLE COUNTIES OF
MINNESOTA, 1926-1927 ^a

COUNTY	Number of properties	Average assessment ratio	Coefficient of dispersion
Blue Earth	68	90 13	18 84
Otter Tail	49	70 76	25 86
Polk	52	90 69	20 69
Stearns	76	90 30	15 64
Washington	16	84 56	37 56
Winona	29	80 93	18 76

^a Source. R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and other Mid-Western States*, Iowa University, Commerce College, Business Research Bureau, Iowa Studies in Business No. 10, Jan. 1931, p. 91

The results, in general, were quite similar in both studies, "spottiness," with substantial inequality even in the best assessed counties, and poor and very poor assessments in the worst. Again the differences as between average assessment ratios were not very marked.

Regressivity.—Coincidence of Findings.—The two studies also coincided with respect to the existence of regressivity, or higher ratios for less valuable properties. In the Nelson-Mitchell study, such regressivity (tested by a classification according to value per acre) was found in all of the six counties analyzed, being especially pronounced in Stearns, Blue Earth and Otter Tail. In the Clarke-Jesness study, regressivity (by value of the property) was found in all of the six districts. Table LV shows the facts as found by Clarke and Jesness.

TABLE LV

RELATION OF VALUE OF FARM TO ASSESSMENT RATIO IN MINNESOTA,
1924-1927, BY DISTRICTS ^a

VALUE OF PROPERTY	Number of farms	Average assessment ratio
<i>District I</i>		
\$0-\$5,000.	132	101.6
5,000-10,000	180	96.6
10,000-15,000	128	89.2
15,000-20,000	85	81.1
20,000-45,000	46	77.0
<i>District II</i>		
\$0-\$5,000.	156	98.7
5,000-10,000	265	95.2
10,000-15,000	263	87.2
15,000-20,000	214	87.0
20,000-25,000	138	79.6
25,000-30,000	34	79.1
30,000-55,000	30	70.7
<i>District III</i>		
\$0-\$5,000	179	101.5
5,000-10,000	159	91.4
10,000-15,000	108	84.8
15,000-20,000	56	79.3
20,000-45,000	41	68.4
<i>District IV</i>		
\$0-\$2,500	380	96.6
2,500-5,000	174	77.1
5,000-7,500	82	73.7
7,500-17,500	67	70.1
<i>District V</i>		
\$0-\$2,500	112	103.7
2,500-5,000	136	91.1
5,000-7,500	62	79.8
7,500-10,000	33	77.1
10,000-25,000	43	72.9
<i>District VI</i>		
\$0-\$1,000	120	102.9
1,000-2,000	135	83.6
2,000-3,000	42	69.3
3,000-4,000	30	53.0
4,000-11,000...	19	51.3

^a Clarke and Jesness, *op cit*, p. 13

Further analysis of the phenomenon of regressivity was undertaken in the latter study. In order to determine the nature of the factors associated with regressivity, the data were classified (a) according to the size of the farms, and (b) according to their value per acre. This analysis resulted in the following findings. With the exception of a tendency for the very smallest farms (those under forty acres) to be assessed at the lowest assessment

ratios, there was "no apparent bias in the percentage of their sale value at which the different sizes of farms are assessed. The 80 acre farms seem to fare well as the 160 acre or 240 acre farms and vice versa."⁴ On the other hand, there was a definite and pronounced tendency toward lower ratios of assessment as the value per acre increased. Hence it is the conclusion of Clarke and Jesness that size of farm does not appear to be associated with the tendency toward regressivity, whereas value per acre appears to be definitely correlated with it.⁵

The Blakey Investigation.—Besides the studies made by Clarke and Jesness and by Nelson and Mitchell on Minnesota assessment conditions, there is also the comprehensive investigation made under the direction of Dr. R. G. Blakey.⁶ The six districts designated in the Clarke-Jesness study were also used in this investigation, which was a comparative ratio study utilizing both expert appraisal data and sales values. The latter consisted of some 3,333 transfers of rural properties, as of 1928 and 1929, the records (as in the case of the Clarke-Jesness and Nelson-Mitchell studies) being obtained from the files of the Tax Commission. The appraisal data consisted of valuations placed upon properties by a group of experienced farm men working under the direction of Prof. George A. Pond. These men inspected each farm, and with the aid of soil maps, and also interviews with owners, local bankers and real estate agents, placed an appraisal on 535 owner-operated farms and 1,353 rented farms. Records kept by 229 farmers under the supervision of the Department of Agriculture were also used. The appraisal data were as of 1928-1931, the appraisals for District I being made as of 1928 to 1930, while most of the other appraisals were made in 1931.

Further Evidence on "Behavior Patterns" of Assessments.—Lag Behind Values.—The general findings of the Blakey study on the rural assessment situation were similar to those already discussed. However, further evidence on "behavior patterns," so to speak, of assessments is furnished by this study. For example, the average assessment ratios of the six district increased with the passage of time since the period 1924-1927. The explanation lies in the lag of assessments behind values, in a period of declining values. The average assessment ratio in the period 1924-1927 was 88.67 per cent; in 1928-1929, 94.48 per cent; in 1928-1931, 119.61 per cent. Table LVI shows the facts for the six districts.

⁴ Clarke and Jesness, *op. cit.*, p. 15

⁵ *Ibid.*, pp. 15-20.

⁶ R. G. Blakey and Associates, *Taxation in Minnesota*, Minnesota University Studies in Economics and Business No. 4, 1932, chaps. 3 and 7.

TABLE LVI

AVERAGE ASSESSMENT RATIOS OF RURAL PROPERTIES IN MINNESOTA,
1924-1927, 1928-1929, AND 1928-1931, BY DISTRICTS ^a

DISTRICT	TIME PERIOD		
	1924-1927 ^b	1928-1929 ^c	1928-1931 ^d
I ..	92 3	91 14	106.27
II ..	89.1	92 37	129.25
III ..	90 3	92 05	125.93
IV ..	86 6	93 88	105 71
V ..	89.7	103 34	130.88
VI ..	84 1	89 08	..
Averages	88 67	94.48	119 61

^a Source: G B Clarke and O B Jesness, *A Study of Taxation in Minnesota with Particular Reference to Assessments of Farm Lands*, Minnesota Agricultural Experiment Station Bulletin 277, August 1931, p 14, and R G Blakey, *Taxation in Minnesota*, 1932, pp 42 and 44

^b Clarke-Jesness Sales data

^c Blakey Sales data

^d Blakey Appraisal data

Land-Improvement Inequality.—Another interesting disclosure brought out by this investigation was that farm land was being relatively overassessed as compared with farm improvements. Table LVII shows the results of a computation of the average land assessment ratio and the average improvement assessment ratio, by districts. These ratios were based on the appraisal data.

TABLE LVII

AVERAGE ASSESSMENT RATIOS OF LAND AND IMPROVEMENTS IN
MINNESOTA, 1928-1931, BY DISTRICTS ^a

DISTRICT	AVERAGE ASSESSMENT RATIO	
	Land	Improvements
I ..	117 5	56 5
II ..	151.9	51 7
III ..	149 3	51 9
IV ..	134 7	49 6
V ..	150.5	65.1
Average ^b ..	140 78	54 96

^a Source: Blakey, *op. cit.*, pp 53 and 65

^b Unweighted arithmetic average, computed by the writer

In all of the districts for which data were compiled, land was found to be pronouncedly overassessed. (There were no appraisal data for District VI). Lands were valued for taxation purposes

on the average at almost one and one-half times their appraised value, whereas improvements were valued at slightly more than one-half of their appraised value. This relative differential was equivalent to taxing land at more than two and one-half times the rate of improvements.

Inequalities Associated with Type of Ownership.—Another interesting part of the Blakey study was the attempt to discover whether the assessment ratio was affected by type of ownership. For this purpose, the appraisal data were classified on the basis of whether the farms were owner-operated, rented, or nonresident owned (not owned by a resident of the county). Table LVIII shows the results of this classification.

TABLE LVIII

AVERAGE ASSESSMENT RATIOS OF OWNER-OPERATED, RENTED, AND NONRESIDENT OWNED FARMS IN MINNESOTA, 1928-1931^a

TYPE OF OWNERSHIP	Number of properties	Average assessment ratio
<i>District I</i>		
Owner-operated	180	85.25
Rented	288	115.10
Nonresident owned b	17	136.70
<i>District II</i>		
Owner-operated	128	117.07
Rented	483	128.00
Nonresident owned b	196	148.50
<i>District III</i>		
Owner-operated	110	117.56
Rented	410	117.06
Nonresident owned b	95	150.70
<i>District IV</i>		
Owner-operated	179	99.90
Rented	87	90.70
Nonresident owned b	33	121.10
<i>District V</i>		
Owner-operated	167	124.80
Rented	145	120.70
Nonresident owned b	53	129.50

^a Source: R. G. Blakey, *op. cit.*, p. 55.

^b "Nonresident Owned" = owned by resident of another county

With respect to the assessment ratios of owner-operated as compared with rented farms, the figures indicate that owner-operated farms were relatively underassessed in Districts I and II, and relatively overassessed in Districts IV and V. In District III, the

difference between the two was so slight as to be inconsequential. It is pointed out in the discussion of this table that the owner-operated farms were worth more per acre in all districts except District IV; and since the more valuable farms were generally relatively underassessed, that the type of farm rather than the type of ownership and management was most probably the cause of the lower ratios in Districts I and II. State the investigators: "Considering all districts, the conclusion seems warranted that there is no discrimination in assessment of property because it is rented property. The differences are more likely due to differences in value per acre."

With respect to differences as between the average assessment ratios of resident owned and nonresident owned farms, the situation was quite different. Again the owner-operated sample farms were usually more valuable than the other properties; however, in District III where differences in value were slight, the nonresident owned farms were assessed at an average of 150.70 per cent as compared with 117.56 per cent for the owner-operated farms. Moreover, the differentials were more consistently and more substantially one way. Accordingly, one may agree with the investigators that "the inequalities are great enough and consistent enough in all districts to warrant the conclusion that part of the bias in assessments arises from the fact that some owners are resident and others are nonresident."⁸ It is quite understandable why residence should be a factor. It is the residents of a county who vote and who elect the assessor into office. And most assessors share the sentiment of their electorate that as much of the total tax burden as possible should be placed on non-residents.

THE URBAN SITUATION.—*The Clarke-Jesness Findings.*—With respect to urban properties, 1,662 transfers, as of 1926-1927, obtained from the files of the Tax Commission, were utilized in a ratio test made in the Clarke-Jesness study. The sales were of the various cities of the state, exclusive of St. Paul and Duluth, and included village properties. Table LIX shows the results of a classification of the data by value classes.

⁷ Blakey, *op. cit.*, p. 56.

⁸ *Ibid.*, p. 57.

TABLE LIX

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION
OF SAMPLE URBAN PROPERTIES IN MINNESOTA,
1926-1927, BY VALUE CLASSES ^a

VALUE OF PROPERTY	Number of sales	Average assessment ratio	Coefficient of variation (σ/M)	Coefficient of dis- persion (AD/M) ^b
\$0-\$1,000 ^d	612	93.7	46.58	37.26
1,000-2,000	359	84.0	43.22	34.58
2,000-3,000	254	84.2	29.88	23.90
3,000-4,000	184	74.7	30.14	24.11
4,000-5,000	107	70.8	26.77	21.41
5,000-6,000	63	75.2	38.94	31.15
6,000 and over	83	65.7	34.57	27.06
Total and averages	1,662	79.7	44.68	35.74

^a Source. Clarke-Jessness, *op. cit.*, p. 25.

^b Computed by the writer. Coefficient of variation multiplied by 8.

The situation revealed by this table is far from satisfactory. The average coefficient of dispersion, 35.74 per cent is high, and the tendency to assess the less valuable properties is pronounced.

The Nelson-Mitchell Findings.—In the Nelson-Mitchell study, the average coefficient of dispersion, computed on the basis of a smaller sample of properties in six cities, was found to be 25.97 per cent, indicating a less unsatisfactory situation in these six cities, but nevertheless very substantial inequality. Regressivity, although of an irregular and not very pronounced nature, was also found.

The Blakey Findings.—The Blakey investigation arrived at conclusions similar to those of the two studies described above. The most interesting further material of that study was a classification of the 1930 appraisal data of 111 municipalities according to their population. The results of their classification are shown in Table LX.

This table indicates that the degree of assessment inequality was much greater in the case of communities with populations of less than 500 than in any of the other municipalities. Furthermore, it shows that there was a tendency for the extent of inequality to diminish as the size of the municipalities increased. This last tendency is not conclusively shown, however, due to the sparsity of the data for municipalities with populations of over 10,000 inhabitants.

Summary.—The investigations of Minnesota include some of the most elaborate and interesting studies of assessments which have been made. They point to the following conclusions. Substantial inequality as amongst individual properties exists in the best assessed districts, with glaring assessment inequality in the worst

TABLE LX
AVERAGE ASSESSMENT RATIOS AND INTERQUARTILE RANGES OF
SAMPLE MUNICIPALITIES IN MINNESOTA, 1930, BY
SIZE OF MUNICIPALITY ^a

POPULATION	Number of properties	Average assessment ratio	Interquartile range ^b
Under 500	67	94 11	158 59- 72 93 or 85 66
500- 1,000	170	88 83	120 35- 74 68 or 45 07
1,000- 2,500	306	84 45	110 93- 70 75 or 40.18
2,500- 5,000	159	77 10	98 39- 71 05 or 27 34
5,000-10,000	119	77 69	101 65- 69 10 or 32 55
Over 10,000	13	104 67	108 80-101.70 or 7 10

^a Source Blakey, *op cit*, p 196

^b The range of assessment inequality is measured here by the interquartile range. This is a measure of the variation in assessment of the central half of the sample, the two extreme quarters being excluded. This measure is a better indication of assessment inequality than the simple range, which measures the difference between the highest and lowest ratios of the entire sample, because it focuses attention on the more frequently occurring and more representative ratios. For this reason a comparison of various interquartile ranges has much more significance than one of simple ranges. However, this measure is not as good for such comparisons as the average deviation, upon which the coefficient of dispersion is based, because the latter is an average which is descriptive of the entire distribution of ratios, not a portion of it.

assessed districts. There is inequality as amongst district and county averages; as between resident and nonresident owners, and as between farm land and farm improvements. Finally the system is working regressively both in rural and urban communities.

Iowa

ASSESSMENT, REVIEW AND EQUALIZATION.—Real property in Iowa is ordinarily assessed by township assessors, who are elected by popular vote for terms of two years. As is the general rule in mid-western states which have the township form of local government and assessment, and in contrast to the rule in New England, only one assessor is elected in each township. Cities have their own assessment organization. Real property is now assessed quadrennially.^a The township board of review is composed of the township trustees, who have the power to make adjustments upon their own motion as well as to review complaints of taxpayers. Appeal lies to the county board of review, the members of which are those of the county board of supervisors. In addition to the hearing and deciding of appeals, the county board also equalizes as between townships. Appeals from the actions of the county board may be taken to the State Board of Assessment and Review, which makes the state equalization, by counties and classes. This board was established in 1929, superseding the former ex officio state board of equalization, the State Executive Council. It is composed of three members appointed by the Gov-

^a Prior to Acts of 1933, ch. 119, assessments were made biennially; prior to Acts of 1933, ch. 121, the legal ratio was 25 per cent.

ernor with the approval of the Senate for (after the first appointments) terms of six years

STATE SUPERVISION: POTENTIAL.—In sharp contrast to the lack of state authority with respect to supervision and control over assessments existing prior to 1929, the new state board has extensive powers and duties conferred upon it by law. It has general supervisory powers over local assessing and equalizing officials; is authorized to confer with, advise and direct them as to the proper performance of their duties; and may visit them for this purpose and for investigating their work and methods. It is its duty to prescribe and furnish all assessment books and forms, and may require reports. It is authorized to examine into all cases where violation of the law is alleged. It may direct that proceedings be instituted for the enforcement of the law, and may prefer charges against assessors for their removal for wilful misconduct or maladministration, corruption and extortion. It may require the county boards to reconvene, and may direct them to raise or lower the valuation of the aggregate county roll, of any township or city aggregate, and/or of any individual parcel. It has also been given the power to make reassessments.¹⁰

STATE SUPERVISION: ACTUAL.—Since the establishment of the new order of things in 1929, the state has participated to a far greater extent than before in the matter of assessment administration. It has made investigations of assessment conditions, and has reviewed a large number of appeals, mainly from individuals. In 1933, it published an Assessors' Manual, giving detailed instructions to the local officials as to systematic methods of assessment. It is very probable, therefore, that assessment conditions in this state have been improved since the new policy was instituted.¹¹

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality.*—The available evidence on assessment conditions in this state is confined to tests made of the situation prior to 1929. R. W. Nelson and G. W. Mitchell, in their chapter on Iowa in their study of assessments in the Mid-west, utilized 3,949 sales records, as of 1927, from a total of 10,557 transfers, 9,685 of which had been collected and recorded by the Chicago and Northwestern Railway Company and 872 by Prof. J. E. Brindley. Of the 3,949 transfers utilized, 1,419 were of property in eight cities, 479 of property in fourteen towns, and 2,051 of rural property in forty-one counties. The ratios were calculated and classified, and the average assessment ratios and coefficients of dispersion computed. The rural properties were assessed with the least degree of inequality of the three, the coefficient of dispersion, 19.16 per cent, indicating, however, a substantial amount of injustice. The eight cities made a much

¹⁰ Acts of 1929, ch. 205, secs 1, 2, 17, 24.

¹¹ Based on Iowa State Board of Assessment and Review, *Taxable Valuation of Property*, 1933, pp. 7-8. See also Iowa State Board of Assessment and Review, *Assessors' Manual*, 1933, *passim*.

poorer showing, with a coefficient of dispersion of 30.06 per cent, as did the fourteen towns, with a still higher coefficient of dispersion, 32.73 per cent.

Rural-Urban Inequality.—Inter-County Inequality.—There were only slight differences in the average assessment ratios for the three groups of properties, the average ratio for the rural properties being 48.02 per cent as compared with 50.29 per cent for the fourteen towns and 52.16 per cent for the eight cities. However, there was a considerable amount of inter-county inequality as a tabulation of the average ratios for the rural properties of the forty-one counties shows.

TABLE LXI

DISTRIBUTION OF AVERAGE ASSESSMENT RATIOS OF RURAL PROPERTIES OF SAMPLE IOWA COUNTIES, 1927 ^a

ASSESSMENT RATIO	Number of counties
35-39 9	1
40-44 9	12
45-49 9	17
50-54 9	6
55-59 9	4
60-64 9	1
Total	41

^a Based on Nelson and Mitchell, *op. cit.*, p. 44

As can be observed from examination of Table LXI, the average county ratios ranged from less than 40 per cent to over 60 per cent. The extremes were Hamilton county with an average ratio of 38.97 per cent and Jackson county with an average ratio of 62.43 per cent.

Regressivity—When the rural properties were classified according to their value per acre, a “steady and persistent” tendency was found for the ratios to decline as the value per acre increased. The urban properties manifested “a mild but nevertheless unmistakable tendency toward regression.” ¹²

Summary—In Iowa, as in many other states, assessments have failed satisfactorily to meet the test of uniformity. Instead, inequality and regressivity have been found to exist, resulting in inequitable distribution of the local, county and state levies on real property, and inordinately high taxes on the mass of property owners.

¹² *Ibid.*, pp. 58-59.

Missouri

ASSESSMENT, REVIEW AND EQUALIZATION.—In the 24 of the 114 counties of the state which have township organization, the township clerk acts as assessor *ex officio*. In the other ninety counties, county assessors, elected for terms of four years, together with deputies appointed by them, assess the real property of these counties. All are paid on a commission or fee basis. St. Louis has its own assessor, as do other cities of the first class (over 100,000 population). In cities of the second class (30,000–100,000) there is a chief financial officer called the commissioner of revenue, who is the city treasurer, collector and assessor. In cities of the third, (3,000–30,000) and fourth class (500–3,000), city and county assessors jointly assess real property. In some of the cities of the fourth class, the rolls of the county assessor are adopted.

In the counties without township form of organization, the county board of equalization is composed of the county assessor, surveyor, clerk, and judges of the county court. In the other counties, there is no county assessor, his place on the board being filled by the county sheriff. The county board of equalization has power to make adjustments on its own motion as well as to hear complaints. In most cities of the first class, the mayor, comptroller, and president of the common council hear complaints and make revisions. In other cities, the mayor and assessor sit with the county board of equalization for this purpose. Appeals from the decisions of the county boards of equalization are to be taken to the courts. The state equalization is confined in scope by statute to adjustments as amongst county aggregates and classes of property. The Constitution provides for a State Board of Equalization composed of the Governor, State Auditor, State Treasurer, Secretary of State and Attorney-General. The statutes provide, however, that the State Tax Commission prepare this equalization.¹³ In actual practice, it is made by the Tax Commission, subject to the approval of the *ex officio* board.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members appointed by the Governor with the advice and consent of the Senate for terms of six years. Its statutory powers and duties with respect to supervision and control over assessment administration are moderately extensive. It has general supervisory powers over the local officials, and is authorized to confer with and advise them as to their duties. The commission, either through its members or by a representative, is required to visit each county at least once in two years to ascertain whether the local officials are faithfully discharging their duties. It is empowered to call group meetings at such times and places as it may designate (at the county seat in counties with township organization). It is its duty to prescribe

¹³ Constitution, Art. X, sec. 18; Missouri Statutes Annotated, 1931, sec. 9854.

assessment books and forms for, and may require reports from, the local officials. Subject to final approval by the State Board of Equalization, it is authorized to investigate all complaints of alleged violation of the laws, to see to it that the laws are enforced, and may institute removal proceedings in the courts for violations thereof. It is empowered to raise or lower the assessed valuation of any parcel of real property after notification of the taxpayer affected and the granting of a hearing, which is a sort of limited grant of the power of reassessment.¹⁴

STATE SUPERVISION: ACTUAL.—As is the case with many other state tax commissions, the activities of the Missouri State Tax Commission in the matter of local assessments have been on the decline in recent years. It appears that at one time vigorous attempts at state supervision had been made, state engineers assisting local assessors with difficult properties, an assessors' manual published, and energetic efforts made to obtain objective value data for the state equalization. The general tone of the recent reports is that of diminished interest and vigor. However, it still holds county and statewide conventions, makes the visits required by law, and has continued to publish its assessors' manual. State supervision over assessments is moderately extensive in Missouri at present.¹⁵

RECENT ASSESSMENT CONDITIONS.—*The National Industrial Conference Board Study.*—The National Industrial Conference Board has made a ratio study of assessment inequality in its recent survey of fiscal affairs in Missouri.¹⁶ Some 1,632 transfers of urban property and 1,296 transfers of rural property, all as of 1929, were utilized as the sample. The properties were situated in thirty-nine counties.

Individual Inequality—When the ratios were computed and classified, it was found that they varied from under 10 per cent to well over 120 per cent, in the case of both urban and rural property. Both were assessed with marked inequality, the coefficient of dispersion for the rural properties being 34 per cent, that for the urban properties, 35 per cent (computed by the writer). Table LXII shows the facts upon which these coefficients were computed.

¹⁴ Missouri Statutes Annotated, 1931, secs. 9819, 9833, 9854

¹⁵ Based on recent reports of the Missouri State Tax Commission. See also its *Assessors' Manual*, 1931

¹⁶ National Industrial Conference Board, *The Fiscal Problem in Missouri*, 1930, chap. vi.

TABLE LXII

RURAL AND URBAN DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS
IN MISSOURI, 1929 ^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES	
	Urban	Rural
Under 10.	14	10
10-19	54	52
20-29	134	99
30-39	233	150
40-49	269	177
50-59	284	219
60-69	217	162
70-79	161	142
80-89	131	141
90-99	63	78
100-109	39	39
110-119	6	6
120 and over.	27	13
Totals	1,632	1,296

^a Source. National Industrial Conference Board, *The Fiscal Problem in Missouri*, 1930, p 175

Inter-County Inequality.—The data were classified so as to show the variations as amongst county averages. A compilation of these county averages reveals a great deal of inter-county inequality, as shown in Table LXIII.

TABLE LXIII

DISTRIBUTIONS OF AVERAGE ASSESSMENT RATIOS OF SAMPLE MISSOURI
COUNTIES, 1929 ^a

ASSESSMENT RATIO	NUMBER OF COUNTIES	
	Urban	Rural
30-34.9	1	1
35-39.9	2	3
40-44.9	6	5
45-49.9	7	6
50-54.9	9	6
55-59.9	6	2
60-64.9	3	10
65-69.9	3	4
70-74.9	1	2
Total.	39	30

^a Based on National Industrial Conference Board, *op. cit.*, p. 174.

For urban properties, the greatest extremes were between the county average of St. Louis county, with an average assessment ratio of 30 per cent, and Platte county, with an average ratio of

86 per cent. These two counties also were the extremes for rural properties: St. Louis, 31 per cent; and Platte (also Pettis), 72 per cent.

The Hammar Investigation.—Regressivity.—These same general findings, extensive individual and inter-county inequality, were made in another study of assessment inequality in Missouri, by Dr. C. H. Hammar, in which some 2,451 rural transfers as of the period 1927 to 1931 were utilized.¹⁷ In addition, a test for regressivity was made, which resulted in the findings shown in Table LXIV.

TABLE LXIV

RELATION OF VALUE OF FARM TO ASSESSMENT RATIO IN MISSOURI,
1927-1931^a

VALUE OF PROPERTY	Number of properties	Average assessment ratio
\$0-\$1,000	418	100.4
1,000-2,000	489	79.1
2,000-3,000	394	72.4
3,000-4,000	266	73.6
4,000-5,000	236	73.3
5,000-6,000	137	60.3
6,000-7,000	138	63.4
7,000-8,000	67	64.8
8,000-9,000	56	64.0
9,000-10,000	37	63.1
10,000-11,000	54	61.8
11,000-12,000	17	59.1
12,000-37,000	142	65.5

^a Source: Conrad H. Hammar, *The Accuracy and Flexibility of Rural Real Estate Assessments in Missouri*, Missouri Agricultural Experiment Station Research Bulletin 169, June 1932, p. 13.

Overtaxation of the majority of taxpayers and discrimination in favor of those most able to pay was definitely and emphatically revealed in this study. For example, properties worth less than \$1,000 were assessed at an average ratio of 100.4 per cent; those worth between \$4,000 and \$5,000 at 73.3 per cent; while those worth between \$9,000 and \$10,000 were assessed at 63.1 per cent.

As in the Clarke-Jessness study, an attempt was made to discover whether this regressivity was associated with the size of the farm and/or the value per acre. A classification on these two bases was made, the results of which were as shown in Table LXV.

¹⁷ Conrad H. Hammar, *The Accuracy and Flexibility of Rural Real Estate Assessment in Missouri*, Missouri Agricultural Experiment Station Research Bulletin 169, June 1932.

TABLE LXV

RELATION OF VALUE PER ACRE AND NUMBER OF ACRES TO ASSESSMENT RATIO OF MISSOURI FARMS, 1927-1931^a

VALUE PER ACRE	Number of properties	Average assessment ratio
\$0-\$24.99	140	113 32
25-49 99	174	88 65
50-84 99	113	71 75
85-160 00	32	63 29

NUMBER OF ACRES	Number of properties	Average assessment ratio
0-99 9	287	87 37
100-239 9	150	95 06
240-380	31	93 49

^a Source Hammar, *op cit*, pp. 16-18

From an examination of the assessment ratios, it is clear that the ratios varied inversely with the value per acre, but not inversely with the size of the farms. Indeed the smallest farms, those of less than 100 acres, were found to be assessed at the lowest average ratio of the three subclasses of the size of farm classification. As in the Clark-Jessness study, regressivity was found to be associated with value per acre and not with the number of acres in the farm.

Homogeneity of Soil Types and Assessment Inequality.—One of the most interesting and thought-provoking parts of Dr Hammar's very able investigation was his attempt to correlate homogeneity of soil types and assessment inequality. One might expect that where lands are most varied, where the task is most difficult, there assessments would be made with the least equity. However, exactly the reverse situation was found to be the case in Missouri, the worst inequality being found in counties where the topography and land patterns are relatively uniform and simple. The explanation is given by Dr. Hammar as follows:

"Apparently a high degree of variability enforces a high degree of attention on the part of the assessor to the task at hand and the task of evaluation is well done. On the other hand, where land conditions are uniform and land values do not vary greatly, the tendency is to assess everyone much alike.

"The extreme of this latter situation is found in Atchison county where 64 out of the 110 properties, selling between 1927 and 1932, were assessed at from \$90 to \$95 and 44 at a straight \$95 per acre. In no other county of the 13 was the situation so extreme, although there was a marked tendency to assess at \$50 per acre in

Harrison and between \$35 and \$30 per acre in Barton county. Where the task of assessing is easiest, it is very badly performed. Indeed, so great is the relaxation of attention in counties where the task of valuation is easiest that the final assessment pattern is far less accurate than in counties where the task itself is more exacting."¹⁸

Responsiveness of Assessments to Changes in Value.—Another interesting portion of this study sought to discover the degree of responsiveness of assessments to changes in values. Data on 296 tracts in thirteen townships of Livingston county for the years 1914 to 1931 constituted a sample which was considered to be representative. Dr. Hammar made the following observations:

"The premium on copying the books of the previous assessor apparently does not have the same potency from year to year . . . In 1915, valuations were changed on only 24, or 8.1 per cent, of all the tracts. In 1918, however, values were changed on practically all or 99.3 per cent, of the 296 properties. Other years show varying percentages

"No satisfactory single explanation for this variability on the part of the assessors can be advanced. Apparently a great number of changes were made each time a new assessor was elected, the new office holder being unwilling to accept the valuations of his predecessor in office. An old set of values seems also to fall at a single blow after a period of rapidly changing market values such as in 1918 when practically all valuations were given a substantial upward thrust . . .

"Clearly the system of assessing farm real estate in this Missouri county does not work with a studied and accurate smoothness, but rather jerkily and uncertainly."¹⁹

Summary.—In conclusion, we may say that on the basis of the investigations made by the National Industrial Conference Board and Dr. Hammar, in which were found much individual inequality, inter-district inequality, regressivity and rigidity, the real estate tax in Missouri is very poorly administered.

North Dakota

ASSESSMENT, REVIEW AND EQUALIZATION.—Township assessors, elected by popular vote, and city assessors, appointed by the mayor with the approval of the city council, biennially assess the real property of North Dakota. Where there are no organized townships, the county constitutes a tax district and has its own elective assessor. With the exception of the cities, compensation for assessing is on a per diem basis. Real property is now assessed at a legal ratio of 50 per cent.²⁰ Farm buildings and improve-

¹⁸ Hammar, *op. cit.*, p. 23.

¹⁹ *Ibid.*, p. 30.

²⁰ The ratio was changed from the former 75 per cent by Laws of 1933, p. 493. Initiated measure approved June 29, 1932.

ments are exempt from taxation. In the townships, the township board of supervisors acts as the board of review. In the cities, a board composed of the mayor, council and auditor performs this function. In counties without township organization, the local review and revision are made by the board of county commissioners. In counties with township organization, this board equalizes as amongst tax districts. The state equalization is made by an ex officio board composed of the Governor, State Treasurer, State Auditor, Commissioner of Agriculture and Labor, and the State Tax Commissioner. The Governor is chairman of the board and the Tax Commissioner, who does most of the preliminary work in connection with this equalization, is secretary. The state equalization extends to adjustments as amongst cities and villages as well as amongst counties by law, although it is confined in practice to counties.²¹

STATE SUPERVISION: POTENTIAL—The State Tax Commissioner, who is appointed by the Governor with the advice and consent of the Senate for a term of six years, has extensive statutory powers with respect to supervision of local assessments. He has general supervisory powers over the local officers; is authorized to confer with, advise and instruct them; and, either personally or by representative, to visit them as often as practicable or necessary. Besides powers and duties with respect to forms and reports, he is authorized to examine into cases where violation or evasion of the law is alleged; may institute proceedings in the courts for the enforcement of the law and for the removal of assessors who have violated it; and is empowered to make reassessments with his own appointed agents.²²

STATE SUPERVISION: ACTUAL—The activities of the Tax Commissioner of North Dakota are now chiefly advisory, being largely confined to the preparation and publication of an Assessors' Manual and conferences with the local assessors at county meetings. Some years ago, the supervisory organization was more elaborate and central control was more extensive. A law of 1910 had contemplated the establishment of a county supervisor and assessor of income of the Wisconsin type.²³ This law had been superseded by another law of that year which allowed the Tax Commissioner to appoint a supervisor in each judicial district of the state.²⁴ Such officials had been appointed at various times.²⁵ They had advised and conferred with the local assessors,

²¹ Supplement to the Compiled Laws of North Dakota, Annotated, 1913-1925, sec. 2141-a-2, and letter from Mr. J. J. Weeks, Tax Commissioner, under date of July 3, 1934.

²² Supplement to the Compiled Laws of North Dakota, Annotated, 1913-1925, secs. 2092-a-1, 2092-a-4, 2092-a-5

²³ Laws of 1910, ch. 219.

²⁴ Special Session Laws of 1910, ch. 69. This law merely permitted the appointment of district supervisors, whereas the earlier law had made the appointment of county supervisors mandatory.

²⁵ For example, they had been appointed in 1910 and regularly until 1923 and 1924. They were reappointed again in 1925. *Seventh and Eighth Reports of the State Tax Commission of North Dakota.*

had collected sales data; and had assisted the Tax Commissioner in preparing the equalization table by furnishing him with this information. In 1933, the office of tax supervisor was abolished by law, and the functions formerly exercised by these officials were transferred to a Regulatory Department consisting of a Director, an Assistant Director, and seven inspectors, charged with the supervision of the pure food law, the hotel inspection law, the licensing department law, and a host of other state laws.²⁶ However, the Regulatory Department has not actively assumed any duties in the matter of tax assessment in actual practice thus far.²⁷

RECENT ASSESSMENT CONDITIONS.—A comparative ratio test of assessments, utilizing owners' estimated valuations as the basis of comparison, was made in a study of rural tax problems of North Dakota by R. W. Newton and Alva H. Benton.²⁸ The sample consisted of 154 farms of three counties, values being as of 1924. The test was for only land value assessment inequality. Improvement values, when present, were deducted from the total value, and this value was then compared with the land assessment; however, most of the farms studied had few improvements anyway. The results of a computation and classification of the ratios were as shown in Table LXVI.

TABLE LXVI

DISTRIBUTIONS OF ASSESSMENT RATIOS OF RURAL PROPERTIES IN SAMPLE NORTH DAKOTA COUNTIES^a

ASSESSMENT RATIO	NUMBER OF PROPERTIES			
	Thrall county	Wells county	Hettinger county	All counties
10 and under.				1
10-20		1		1
20-30			1	1
30-40.	2	8	8	18
40-50	10	13	5	28
50-60	14	8	8	30
60-70	12	14	6	32
70-80	6	6	2	14
80-90	2	5	1	8
90-100	2	4		6
100 and over	10	5	2	17
Totals	58	63	33	154

^a Source R. W. Newton and Alva H. Benton, *Some Tax Problems of North Dakota Farmers*, North Dakota Agricultural Experiment Station Bulletin 203, Oct 1926, p 58

²⁶ Laws of 1933, ch. 199

²⁷ Letter from Mr J. J. Weeks, Tax Commissioner of North Dakota, under date of July 3, 1934.

²⁸ R. W. Newton and Alva H. Benton, *Some Tax Problems of North Dakota Farmers*, North Dakota Agricultural Experiment Station Bulletin 203, Oct. 1926, pp. 57-59

The actual range of the assessment ratios was much greater than this table indicates. In Hettinger county, the range was from 23 per cent to 137 per cent; in Thrall, from 33 per cent to 186 per cent; in Wells from 17 per cent to 567 per cent!²⁹ On the basis of the facts of this investigation, the writer has computed the coefficient of dispersion for the sample. It was approximately 32 per cent, indicating very substantial inequality.

Besides this inequality as between individual properties, there was also considerable variation as amongst the three average county ratios. In Thrall, the average assessment ratio was 66 per cent; in Wells, 57 per cent; in Hettinger, 48 per cent.

South Dakota

ASSESSMENT, REVIEW AND EQUALIZATION.—In counties which are organized into townships, the township constitutes an assessment district. Cities (and unorganized counties) also constitute assessment districts. A township assessor is elected each year in the townships. In some of the cities, assessors are appointed by the mayor with the approval of the city council; in others, they are elected by popular vote. Real property is assessed annually. Review and revision are performed by the board of supervisors in townships; the board of trustees and clerk in incorporated towns; and the governing body and auditor in cities. In counties having no local boards of review, the county commissioners, together with the county auditor, hear complaints and make adjustments. In the other counties, these officials constitute the county board of equalization, in which capacity they hear and decide appeals from the decisions of the local boards and equalize as amongst tax districts. Appeals may be taken from decisions of the county boards to the State Board of Equalization, or to the courts. The former body is now composed of the Director of Taxation, the Assistant Director of Taxation and the State Auditor.³⁰ The state equalization was confined to adjustments as amongst tax districts and counties by law prior to 1933. In that year, however, the scope of the state equalization was extended to cover changes as amongst individual parcels.³¹

²⁹ *Ibid.*, pp. 57-58.

³⁰ Laws of 1931, ch. 96. Up to the time of the reorganization of the state administration in 1925, a state tax commission had made the state equalization. In that year, it was provided that the Secretary of Finance (the head of the new Department of Finance), the Director of Taxation (the head of the new Division of Taxation), and the Assistant Director of Taxation (if such were appointed, if not, the Director of Audits and Accounts) should constitute the State Board of Equalization. By laws of 1931, ch. 96, it was provided that the Secretary of Finance could also be the Director of Taxation, and that the State Board of Equalization should be composed of the Director of Taxation, the Assistant Director, and the State Auditor. At the present time, the Secretary of Finance is the Director of Taxation.

³¹ Laws of 1933, ch. 186.

STATE SUPERVISION: POTENTIAL.—The Director of Taxation has succeeded to the powers and duties of supervision and control over assessments possessed by the former Tax Commission. He has general supervisory powers over the local officials; is authorized to confer with, advise and direct them as to the proper performance of their duties and to construe the laws of the state for their guidance. Besides powers and duties with respect to forms and reports, he is authorized to examine into cases where omission, fraud or inequality is alleged, and it is his duty to institute corrective measures. He is also empowered to direct that proceedings be instituted in the courts for the removal of assessors for official misconduct or neglect of duty. He may order the local assessors to reassess, but cannot make such reassessment with his own appointed officers.³²

STATE SUPERVISION: ACTUAL.—The activities of the Division of Taxation with respect to assessment are moderately extensive, being chiefly of an advisory and educational nature. Sales data are compiled for equalization purposes. An Assessors' Handbook has been prepared and distributed. Letters and instructions are sent to the local officials, and meetings are held with the assessors in the various counties of the state. The power of ordering reassessments has been exercised only once in the past ten years.³³

RECENT ASSESSMENT CONDITIONS.—E. P. Crossen in a study of taxation in South Dakota made the following comments on the assessment situation in this state:

"Local assessors are elected each year by popular vote of the people, not necessarily because of their qualifications—their familiarity with property values, with tax laws, etc., but possibly because of personal popularity or of political connections. From the fact that township assessors are elected by popular vote and also because the assessment unit is relatively small in area, the personal factor is very likely to influence the valuation placed upon property. That some of the local assessors are not qualified by training or experience to make a fair valuation of property is evidenced by the lack of any consistent relationship between representative sale values of property and the assessed valuation placed upon such property. A study of representative sales of farm land showed that farms sometimes sold for more, sometimes for less, than they were assessed. Frequently the same farm was given the same assessed valuation year after year, in spite of a tendency in recent years for land values in the state to increase."³⁴

³² South Dakota Compiled Laws, 1929, sec. 6587.

³³ Data from *Report*, 1931-1932, pp. 7-9, and letter from Mr. W. C. Welsh, Director of Taxation, Division of Taxation, and Secretary of Finance, Department of Finance, under date of June 14, 1934.

³⁴ E. P. Crossen, *Taxation and Public Finance in South Dakota*, South Dakota Agricultural Experiment Station Bulletin 232, June 1928, p. 28.

Nebraska

ASSESSMENT, REVIEW AND EQUALIZATION.—The assessment unit in Nebraska is the precinct, which virtually corresponds to the township in rural areas and the ward in cities. In each precinct an assessor is elected by popular vote, serving for a term of two years, and compensated on a per diem basis. Real property is now assessed biennially.³⁵ The precinct assessors perform their duties under the supervision of a county assessor. The latter is a full-time salaried official in fifty-six of the counties, specifically elected to the office for a term of four years. In the remaining thirty-seven counties of the state, the county clerk acts as the supervising county assessor. In counties of 150,000 or more inhabitants, the county assessor appoints the precinct assessors (with the consent of the board of county commissioners) in lieu of the more usual method of selection by popular election as stated above. The members of the board of county commissioners, together with the county assessor and county clerk, constitute the county board of equalization, which board has power to hear and decide complaints of taxpayers and to make adjustments upon its own motion. Appeal from the decisions of the county board lies to the courts. The state equalization is made by an ex officio board composed of the Governor, the Secretary of State, the State Auditor, the State Treasurer, and the State Tax Commissioner. The Governor is chairman of the board; the Tax Commissioner, secretary. This state equalization is confined to county aggregates in practice, although it appears that the law allows adjustments as amongst subdivisions of counties as well.³⁶

STATE SUPERVISION: POTENTIAL.—The State Tax Commissioner is appointed by the Governor with the confirmation of the Senate for a term of two years. He possesses moderate statutory powers and duties in the matter of supervision over assessments in his own right, more drastic powers being subject to the confirmation of the ex officio state board of equalization. Thus, the Tax Commissioner has general supervision over the local officials, prepares assessment forms and blanks, distributing these as well as general advice and instruction to the local assessor via the supervisory county assessors. With respect to the power of reassessment, his authority is limited to recommending to the State Board of Equalization that it order such to be made. It is provided that the state board must first grant a hearing at which the county or precinct assessor be given an opportunity to show cause why a reassessment (by special assessors designated by the Tax Commissioner) should not be made. In the matter of the removal power, also, the authority of the Tax Commissioner

³⁵ Prior to Laws of 1933, ch. 130, real estate assessments were made quadrennially.

³⁶ Letter from Mr. Wm. H. Smith, Tax Commissioner of Nebraska, under date of June 13, 1934. Compiled Statutes of Nebraska, 1929, ch. 77, sec. 1004.

is limited to a recommendation to the state board. The latter is authorized to remove a county assessor for wilful neglect or refusal to perform his duty. Incidentally, precinct assessors are removable for similar cause by the county board of equalization.³⁷

STATE SUPERVISION: ACTUAL.—State administration with respect to equalization and supervision of assessments is of a definitely *ex officio* character in Nebraska. Even the State Tax Commissioner is also Director of the Budget, State Comptroller, and Supervisor of State Purchasing. As a result of the pressure of the many other duties of the state officials, it is not surprising to learn that state supervision and control over the local assessment in Nebraska is of a very nominal sort. The advisory and educational activities appear to be very slight, and the more drastic powers of reassessment and removal have been very seldom exercised, if at all. The supervision exercised by the county assessor is of negligible importance.³⁸

RECENT ASSESSMENT CONDITIONS—*Individual Inequality*.—A ratio test of assessment inequality in Nebraska was made by R. W. Nelson and G. W. Mitchell in the study of assessment conditions in the Mid-west to which reference has already been made. Sales value constituted the basis of comparison, 1,479 transfers of properties in seven cities and 884 transfers of rural properties in twelve counties being taken as a representative sample. The transfers took place in the year ending April 1, 1928. The data were originally obtained by the Chicago, Burlington and Quincy Railroad Company. Considerable inequality was revealed when the ratios were calculated and classified and the coefficient of dispersion computed. For the rural properties, the coefficient of dispersion was 26.65 per cent; for the urban properties, 27.30 per cent.

Rural-Urban Inequality.—Another type of inequality uncovered was the difference between the average assessment ratio of all the sample rural properties and that of all the urban properties. The average rural ratio was 58.62 per cent; the average urban ratio, 47.85 per cent.

Variations as Amongst County Average Assessment Ratios and Coefficients of Dispersion.—Considerable variations as amongst the average assessment ratios and coefficients of dispersion of these sample counties was revealed, as shown in Table LXVII.

³⁷ Compiled Statutes of Nebraska, 1929, ch. 77, secs. 301-306, 1611.

³⁸ Data from R. W. Nelson and G. W. Mitchell, *op cit.*, chap. v, and letter from Mr. Wm. H. Smith, Tax Commissioner of Nebraska, under date of June 13, 1934.

TABLE LXVII

AVERAGE ASSESSMENT RATIOS AND COEFFICIENTS OF DISPERSION
IN SAMPLE COUNTIES AND CITIES OF NEBRASKA, 1928^a

COUNTY	Number of properties	Average assessment ratio	Coefficient of dispersion
<i>Counties with Full-Time County Assessor</i>			
Box Butte	67	43 90	32 60
Cherry	85	76.06	36 69
Cheyenne	103	70 82	23 21
Custer	96	54 77	26 51
Keith	56	49 88	37 01
Perkins	87	41 51	23 27
<i>Counties Without Full-Time County Assessor</i>			
Antelope	49	74 84	27 07
Buffalo	78	61 78	20 18
Furnas	52	58 67	22 17
Gage	58	67 40	15 99
Lincoln	104	52 18	33 42
Red Willow	40	51 67	21 66
<i>Cities in Counties with Full-Time County Assessor</i>			
Lincoln	681	60 99	25 10
Hastings	195	53 56	31 39
Fremont	161	53 47	23 00
Grand Island	171	46 25	34 21
<i>Cities in Counties without Full-Time County Assessor</i>			
Beatrice	118	48 72	26 48
North Platte	87	35 87	27 24
McCook	66	36 11	23 71
	1,479	47 85	27 30

^a Source Nelson and Mitchell, *op cit*, p 113

The average ratio in Perkins county was 41.51 per cent; in Cherry county, 76.06 per cent. In the city of North Platte, the average ratio was 35.87 per cent; in Lincoln, 60.99 per cent. As for the variations in the index of assessment inequality, namely, the coefficient of dispersion, Gage county was apparently least unsatisfactorily assessed, with a coefficient of 15.99 per cent; Keith county worst assessed, with a coefficient of 37.01 per cent. In the cities, Fremont, with a coefficient of 23.00 per cent and Grand Island, with a coefficient of 34.21 per cent, were the extremes.

Incidentally, the comparatively trivial importance of the supervision exercised by the Nebraska county assessor, commented upon by Nelson and Mitchell in their description of the system, is demonstrated by the fact that as a group, the six counties and three cities which do not have a full-time county assessor made a better showing than those which have a full-time county assessor. The average coefficient of dispersion for the six counties with a

full-time county assessor was 29.88 per cent as compared with 23.42 per cent for the six counties where the county clerk performs the functions of that office in an ex officio capacity. Again, in the four cities located in counties with a full-time county assessor, the average coefficient of dispersion was 28.43 as compared with an average coefficient of dispersion of 25.81 for the other three cities. Several explanations are possible. It may be supposed that the part-time supervising officials happened to be more efficient; or at the other extreme, that the supervising official actually exerts a bad influence. But neither of these explanations are probably right. It is most likely that the work of the supervisory county assessor is of slight influence, and whether he carries on his limited activities on a full-time or part-time basis makes very little difference, other and more important considerations determining the quality of the assessment.

Regressivity—Not only were inter-property and inter-district inequality found to exist in assessments in Nebraska but also pronounced and widespread regressivity. It was found that there was a tendency for farms of low value per acre to be proportionally overassessed in every one of the counties investigated.³⁹

Kansas

ASSESSMENT, REVIEW AND EQUALIZATION.—The township trustee, the chief administrative officer of Kansas townships, is usually the primary assessing officer in this state. County assessors, who are elected by popular vote for terms of two years, serve as supervisory officers. They are authorized to appoint deputies to do the actual assessing, but where township trustees exist, the latter must be appointed. In cities, the appointment of deputies must be approved by the county commissioners. The township officials are compensated for their work in connection with real property assessments (which are made quadrennially) on a per diem basis. In counties of 25,000 inhabitants or less, the county assessor is also compensated on a per diem basis; in the more densely populated counties, on a salary basis. In counties of less than 65,000 inhabitants, the county clerk acts as county assessor, no county assessor being elected.

The board of county commissioners sits as a county board of equalization, in which capacity it hears and decides complaints, with power to make adjustments upon its own motion. Appeals from the decisions of the county board may be taken to the Tax Commission, which also makes the state equalization. This equalization is very extensive in scope by law, including the possibility of adjustments as amongst counties, cities and townships, and individual properties.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members who are appointed by the Governor

³⁹ Nelson and Mitchell, *op. cit.*, p. 117

for terms of four years. As is the usual case in the states of the Mid-west as contrasted with the states of the East and the South, the statutory powers and duties of the Tax Commission with respect to central control and supervision over assessments are extensive. It has general supervision over the local officials, is authorized to confer with, advise and direct them in the performance of their duties, and to visit each county for the purpose of investigating their work and methods as often as is deemed necessary. The Tax Commission is directed to hold a conference of county assessors at least once every two years at the capitol. It is required to provide a uniform method of keeping tax rolls and books, also of forms for such reports from the local officials as it may request. It is authorized to examine into all cases where violation of the law is alleged, with powers to recommend such measures as will remedy the defects discovered. It is empowered to require any county board to reconvene, and may make such orders as it deems necessary to such board with respect to changes as concerns persons, towns, cities and/or classes of property. It may institute proceedings for the enforcement of the laws, and may remove a county assessor after a hearing for official misconduct or neglect of duty. Upon complaint of the supervising county assessor, the State Tax Commission may remove township assessors from office. The commission also has the power to make reassessments by deputies appointed by itself.¹⁰

STATE SUPERVISION. ACTUAL.—The Kansas State Tax Commission has taken a moderately active part in local assessment work. Besides visits and conferences, the commission publishes instructions periodically to the local officials. It also hears and decides a considerable number of appeals. Such reassessments as it has made in recent years have been made upon complaint of taxpayers of cities and townships. The powers of removal of township assessors has been exercised in only one or two instances.¹¹

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality*—An extensive study of assessment inequality in Kansas has been made by Dr. Eric Englund.¹² This study was the first modern comprehensive ratio test of assessment inequality made in the United States. Some 7,353 rural transfers, which took place in the ten-year period from 1913 to 1922 inclusive, constituted the sample. The data were obtained from the files of the State Tax Commission. Dr. Englund computed the average coefficient of dispersion for rural properties to be 22.5 per cent, indicating a

¹⁰ Revised Statutes of Kansas Annotated, 1923, ch. 79, secs. 1401, 1401, 1411, 1413.

¹¹ Based on recent reports of the Kansas State Tax Commission and letter from Mr. Clarence Smith, Secretary of the Kansas State Tax Commission, under date of July 9, 1934.

¹² Eric Englund, *Assessment and Equalization of Farm and City Real Estate in Kansas*, Kansas State Agricultural College Bulletin 232, July 1924.

substantial amount of inequality. For urban properties, the average coefficient of dispersion for the state, based on a sample of 3,647 transfers of the same ten-year period, was slightly less, 19.7 per cent.⁴³

Inter-County Inequality.—When all of the properties in the sample were classified according to counties, wide inequality as amongst the various average county assessment ratios was revealed. For rural properties, the range of these averages was between 46.2 per cent in Scott to 77.9 per cent in Hamilton. The range for urban properties was even greater: from 16.7 per cent in Stanton to 90.2 per cent in Leavenworth. Urban inter-county inequality was considerably worse than rural as a classification of the average county ratios, presented in Table LXVIII, shows.

TABLE LXVIII

DISTRIBUTIONS OF AVERAGE ASSESSMENT RATIOS OF KANSAS COUNTIES, 1913-1922, RURAL AND URBAN ^a

AVERAGE ASSESSMENT RATIO	NUMBER OF COUNTIES	
	Rural	Urban
Under 30		1
30-34.9		1
35-39.9		1
40-44.9		1
45-49.9		5
50-54.9	5	11
55-59.9	7	14
60-64.9	13	18
65-69.9	26	21
70-74.9	30	17
75-79.9	17	10
80-84.9	2	4
85-89.9	....
90-94.9		1
	105	105

^a Based on Eric Englund, *op. cit.*, pp. 40-47

Regressivity.—With respect to regressivity, a classification according to value groups of 10,307 parcels of farm real property of fifteen counties, and of 10,231 parcels of urban property of sixteen counties, transfers of which had been made in the ten-year period 1913-1922, constituted an excellent test. Table LXIX shows the results obtained.

⁴³ Englund, *op. cit.*, pp. 56, 57.

TABLE LXIX

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN KANSAS,
1913-1922 *

<i>Rural</i>			
GROUP	Number of properties	Average price per sale	Average assessment ratio
I ..	1,123	\$1,222	85.7
II ..	1,920	2,567	76.7
III ..	1,981	3,993	72.9
IV ..	1,503	5,588	70.0
V ..	1,095	6,885	66.4
VI ..	717	8,662	65.3
VII ..	587	9,714	62.3
VIII ..	1,381	16,956	58.7
Total and averages.	10,307	\$6,353	65.0

<i>Urban</i>			
GROUP	Number of properties	Average price per sale	Average assessment ratio
I ..	1,411	\$176	97.0
II ..	1,552	483	89.0
III ..	1,547	819	82.9
IV ..	924	1,073	80.5
V ..	1,120	1,242	76.5
VI ..	1,138	1,703	74.5
VII ..	1,050	2,496	70.9
VIII ..	1,487	5,954	69.1
Total and averages	10,231	\$1,766	73.3

* Source: Eric Englund, *op cit*, pp 14-17. Number of properties and averages from Eric Englund, *Tax Revision in Kansas*, Kansas Agricultural Experiment Station Bulletin 234, Dec 1924, p. 34.

This test for regressivity is one of the most thorough which has been made. It is based on over 20,000 cases. It resulted in a finding of a definite, regular and pronounced tendency for the assessment ratio to vary inversely with the value of the property. Thus, in the case of the farms, properties worth \$1,222 on the average were assessed at a ratio of 85.7 per cent; those worth \$5,588 on the average at 70.0 per cent; those worth \$16,956 on the average at 58.7 per cent. Similarly in the case of the urban properties: the least valuable group were assessed at 97.0 per cent; the most valuable at 69.1 per cent.

Rural-Urban Inequality.—The rural properties were assessed at an average ratio of 65.6 per cent as compared with an average ratio of 73.3 per cent for the urban properties. Hence there was inequality as between urban and rural properties, in addition to the other types of inequality described.

Land-Improvement Inequality.—Another type of inequality found, although the evidence presented was admittedly inconclusive, was that between land and improvements of farm property. The basis for this belief was a comparison of census values and assessed values. In 1920, the census listed the percentage of farm improvements to total farm property as 12.5 per cent. This percentage on the tax rolls was only 7.3 per cent. In other words, the percentage of improvements to total farm property was smaller on the rolls than as reported to the census. Hence, it may be inferred that improvements were being relatively underassessed.

Summary—The results of the Englund study were similar to the results of ratio studies of assessment inequality subsequently made in other states. Substantial individual, inter-county and rural-urban inequality were found. Of notable importance was the way that the comprehensive and thorough regressivity test was met, regressivity being found to be pronounced and without a single irregularity in the trend, in both the rural and urban classifications

CHAPTER IX

THE WEST SOUTH CENTRAL STATES

Arkansas

ASSESSMENT, REVIEW AND EQUALIZATION.—The real property of cities and towns is assessed in odd years, the property outside of cities and towns, in even years, in Arkansas. Up to 1929, assessment and equalization had been made by boards of assessment composed of an elective county assessor and two part-time township assessors appointed by the county judge. In that year, however, the present system of an elective full-time salaried county assessor (with statutory provision for deputies, according to population) for assessment, and a county equalization board of three members appointed by the county quorum court for review and equalization was inaugurated.¹ Appeals from the decisions of the county boards of equalization lie to the courts, and not to the Tax Commission.² A state equalization is provided for by law, as amongst districts, cities, townships and counties. Prior to 1933, this function had been entrusted to a State Tax Commission of three full-time appointive members. Due to the need for economy and retrenchment, however, this commission was abolished in that year, and its functions, as well as those of the Railroad Commission and the Conservation Commission, consolidated into a tri-membered appointive body, the Arkansas Corporation Commission.³ The Corporation Commission, with its wide responsibilities in many fields, is in the nature of a cyclical regression in the secular trend toward specialization and division of labor.

STATE SUPERVISION: POTENTIAL—The statutory powers of the Corporation Commission with respect to supervision and control are very extensive. It is authorized to determine annually the legal ratio of assessment. (In recent years, this ratio has been set at 50 per cent.) It has general supervisory powers over the local officials; is authorized to confer with, advise and direct them as to their duties; to construe the tax laws; and to prescribe rules and regulations to govern them in the performance thereof. It is empowered to request reports from them, and may visit them for the purpose of investigating their work and methods. It is also authorized to call meetings or conferences of assessors. It is required to examine into cases where violation of the law is alleged, and to institute proceedings for the enforcement of the law and for the removal from office of local assessing officers for official misconduct or neglect of duty. It may require county boards

¹ Acts of 1929, No 172. In counties of over 75,000 inhabitants the board consists of nine members.

² Ruling of Tax Commission, October 25, 1927. Commerce Clearing House, *State and Local Taxation*, Arkansas, p. 2052.

³ Acts of Arkansas, 1933, No. 12.

of equalization to reconvene and re-equalize according to its instructions; and may order reassessments to be made by either the county assessors or by a person or persons recommended by the county judge and appointed by the commission.⁴

STATE SUPERVISION: ACTUAL—Lack of funds has prevented any substantial use of the wide powers of supervision possessed by the Tax Commission and its successor, the Corporation Commission. The activities of the Tax Commission in recent years had been mainly advisory. It had prepared a booklet containing a synopsis of the assessment laws and instructions for their enforcement, and had met with the assessors in visits and conferences. It had frankly acknowledged that these activities constituted the method of attempting to achieve equalization of the state levy, no equalization in the orthodox sense of the word being made, because of limitations of funds and staff. The power to order reassessments had been very rarely exercised, and since 1929 not at all.⁵ Considering the numerous duties of the new Corporation Commission, it is to be expected that even less state supervision and control than before will be exercised over the local assessment.

RECENT ASSESSMENT CONDITIONS—Prior to the reorganization of assessment administration and the abolition of the township boards, C. O. Brannen made a ratio test of assessment inequality in this state. Estimated values were utilized as the basis of comparison. The time period selected was the period 1921–1925 inclusive. The ratios, when computed, were found to vary from 5 per cent to over 100 per cent in the case of both urban and rural properties.⁶

On the basis of the facts of this investigation, Martin and Stephenson have computed the coefficients of dispersion.⁷ In both the case of rural and urban properties, very considerable inequality was indicated by these figures, although the rural situation was found to be much more inequitable. The urban coefficient of dispersion was 33.71 per cent; the rural, 41.80 per cent.

In 1929, the Arkansas Commission on Business Laws and Taxation made a list of the most glaring defects in the revenue laws and administration of this state. Included in this list was "Indifferent practice of assessing officers under the township board regime, resulting in the widest disparity in the several districts in the assessment of property identical in character and worth."⁸

⁴ Crawford and Moses Digest of the Statutes of Arkansas, as amended by the 1927 and 1931 Supplements, sec. 97781.

⁵ Based on recent reports of the Arkansas Tax Commission, and letter from Mr. W. H. Childers, member of the Arkansas Corporation Commission, under date of July 9, 1934.

⁶ C. O. Brannen, *The Farm Tax Problem in Arkansas*, Arkansas Agricultural Experiment Station Bulletin 223, February 1928, pp. 24–27.

⁷ J. W. Martin and C. M. Stephenson, *loc. cit.*

⁸ *Report of the Arkansas Commission on Business Laws and Taxation*, 1929, p. 164.

No evidence is available on the operation of the present county unit system, but certain it is that the former system had resulted in very unsatisfactory tax administration.

Louisiana

ASSESSMENT, REVIEW AND EQUALIZATION.—Tentative average values for various classes of property are set annually by the Tax Commission for the guidance of local assessors in Louisiana. Although the assessors are not required to assess individual properties at precisely these values, the class land value must not be less on the average than as set by the Tax Commission. Subject to this limitation, assessments are made in first instance by parish assessors, elected by popular vote for terms of four years and serving on a salary basis.⁹ The reviewing procedure is elaborate. A parish board of equalization composed of two persons appointed by the police jury (the governing body of the parish) and one member appointed by the Tax Commission hears complaints of taxpayers and makes adjustments. From the decisions of these boards, appeals may be taken to the State Tax Commission, which also makes the state equalization, by classes and counties. Appeals from the action of the Tax Commission may be taken to the police jury, which may recommend changes to the Tax Commission. The latter then goes over the evidence again and takes final action, except for the possibility of further appeal to the courts.¹⁰

STATE SUPERVISION: POTENTIAL.—The Louisiana Tax Commission is composed of three members appointed by the Governor with the advice and consent of the Senate for terms of six years. Its powers and duties with respect to supervision over assessments are fairly extensive. It has general supervision over the local officials; is directed to advise and confer with them; to prescribe rolls and forms for them; and may require reports from them. It is required to investigate alleged violations of the laws. It is authorized to "publicly reprimand" assessors for being wilfully negligent or unfair, but it cannot order their removal from office.¹¹ With respect to reassessment, the writer has been advised that the commission believes that it probably possesses the power, although this power has never been exercised.¹²

STATE SUPERVISION: ACTUAL.—Contrary to the general practice of most southern states, the Louisiana Tax Commission actively participates in the matter of assessments. It sets average values

⁹ The parish is the unit of local government in Louisiana. It corresponds to the county of other southern states.

¹⁰ Appeals to the courts may also be taken from the prior action of the police jury, *i. e.*, if it declines to recommend a decrease to the State Tax Commission.

¹¹ Louisiana General Statutes, 1932, secs. 8313, 8321.

¹² Letter from Mr. Theo. S. Landry, Chairman of the Louisiana State Commission, under date of June 20, 1934.

for different types of land and other property, and has a representative on the parish board of equalization. It has a force of field men or inspectors who report to the Tax Commission on assessment conditions and inequalities throughout the state. In carrying out these activities, its policy is one of co-operative guidance rather than force.¹³

RECENT ASSESSMENT CONDITIONS—A ratio test of Louisiana assessment inequality was made by R. L. Thompson and B. W. Allin in their recent survey of the tax situation in this state.¹⁴ Sales prices were the basis of comparison, 3,151 rural transfers and 4,851 urban transfers constituting the sample. These transfers were made in the period from 1925 to 1930. No coefficients of dispersion were computed, nor were the ratios classified in such a way that this average index of inequality could be computed. However, the study throws a good deal of light on the assessment situation in this state with respect to inter-parish inequality, rural-urban inequality, and regressivity.

Inter-Parish Inequality.—Rural-Urban Inequality.—As concerns inter-parish inequality, the facts were as presented in Table LXX.

TABLE LXX

AVERAGE ASSESSMENT RATIOS IN SAMPLE PARISHES OF LOUISIANA,
1925-1930^a

PARISH	RURAL		URBAN	
	Number of properties	Average assessment ratio	Number of properties	Average assessment ratio
Beauregard	440	39.2	395	71.0
Jefferson Davis	306	52.5	656	72.3
Natchitoches	335	55.1	284	72.3
Iberia and Lafourche	327	48.3	656	60.0
Tensas and Concordia	82	60.0	342	56.4
Union	367	49.5	145	61.6
Saint Landry	418	60.3	806	61.9
Webster	273	47.0	662	66.4
Tangipahoa	553	44.9	815	48.8
Totals and averages	3,151	51.0	4,851	61.4

^a Source R. L. Thompson and B. W. Allin, *Louisiana Farm Taxes*, Louisiana Agricultural Experiment Station Bulletin 231, Part II, May 1933, p. 23.

As can be observed from examination of Table LXX, the ratio of assessed to sales value varied from an average of 39.2 per cent in the parish of Beauregard to 60.3 per cent in Saint Landry, in the case of rural properties; and from 48.8 per cent in

¹³ Based on recent reports of the Louisiana Tax Commission and letter from Mr. Theo. S. Landry, Chairman of the Louisiana Tax Commission, under date of June 20, 1934.

¹⁴ R. L. Thompson and B. W. Allin, *Louisiana Farm Taxes*, Louisiana Agricultural Experiment Station Bulletin 231, Part II, May 1933, pp. 17-23.

Tangipahoa to 72.3 per cent in the parishes of Jefferson Davis and Natchitoches, in the case of urban properties. The table also reveals that the average assessment ratio for the urban properties was over 10 points higher or about 20 per cent greater than the rural ratio.

Regressivity.—A thorough test of regressivity was made in this study. Not only were all of the 8,002 properties classified according to their total value, but, in addition, the rural properties were classified by value per acre. Table LXXI shows the results of the classification by total value.

TABLE LXXI

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN LOUISIANA, 1925-1930^a

VALUE OF PROPERTY	URBAN		RURAL	
	Number of properties	Average assessment ratio	Number of properties	Average assessment ratio
\$0- \$50.	246	176 9	60	180.8
51- 100	485	128 9	41	137 2
101- 150	413	118 1	110	104 6
151- 200	313	96 7	132	96 0
201- 250	265	98.5	85	81 5
251- 300	282	99 6	165	77 2
301- 350	157	85 4	67	64 6
351- 400	195	90 5	166	67 8
401- 450	124	74 8	57	72 5
451- 500	301	82 4	180	66 5
501- 1,000	849	74.0	717	54 6
1,001- 1,500	380	64 6	364	48 9
1,501- 2,000	228	56 0	264	46 0
2,001- 2,500	154	57 3	128	44 0
2,501- 3,000	135	50 7	110	47 9
3,001- 3,500	77	53 8	71	48 0
3,501- 4,000	60	49 9	62	39 6
4,001- 4,500	49	49 0	25	45 1
4,501- 5,000	28	46 5	40	43 4
5,001- 5,500	21	47 7	22	82 6
5,501- 6,000	17	53.0	16	42 7
6,001- 6,500	11	49 1	19	48.1
6,501- 7,000	7	53 6	10	55 5
7,001- 7,500	7	39 3	15	50 2
7,501- 8,000	2	41 8	14	70 2
8,001- 8,500	5	67 4	6	62 3
8,501- 9,000	3	80 0	6	57 0
9,001- 9,500	3	40 7	1	11 4
9,501-10,000	9	47 5	11	48 7
10,001-10,500	0	...	1	52 8
10,501-11,000	1	65 4	6	73 9
11,001-11,500	1	43 5	5	51 4
11,501-12,000	1	10 4	1	54 2
12,001-12,500	6	40 3	0	...
12,501-13,000	3	39 8	5	35 6
13,001-13,500	0	...	2	31 4
13,501-14,000	0	...	6	51 2
14,001-14,500	1	29 0	0	...
14,501-15,000	2	22.4	4	84 6
15,000 and over	7	39 9	57	47 2
Totals and averages.	4,851	61 4	3,151	51 0

^a Source: R. L. Thompson and B. W. Allin, *op cit*, pp. 19-22.

A very definite and pronounced tendency for the assessment ratio to decline as the value of the property rose was found to exist in the case of both the rural and urban properties. Urban properties worth less than \$50 were assessed at an average of 176.9 per cent; those worth from \$501 to \$1,000 at 74.0 per cent; from \$4,501 to \$5,000 at 46.5 per cent; from \$9,001 to \$9,500 at 40.7 per cent; from \$14,501 to \$15,000 at 22.4 per cent. The trend was not entirely regular, but it was fairly regular, especially where the averages were based on a substantial number of cases. A similar situation was found to exist in the case of the rural properties. Properties worth less than \$50 were assessed at an average of 180.8 per cent; those over \$15,000 at 47.2 per cent. Again, the trend was, although somewhat irregular, persistent and definite.

When the rural properties were classified according to value per acre, the results were as shown in Table LXXII.

TABLE LXXII

RELATION OF VALUE PER ACRE TO ASSESSMENT RATIO IN LOUISIANA,
1925-1930^a

VALUE PER ACRE	Number of properties	Average assessment ratio
\$0- \$5	209	158.8
6- 10	442	87.1
11- 15	414	61.8
16- 20	315	58.4
21- 40	644	53.9
41- 60	419	51.5
61- 80	252	44.3
81- 100	163	38.1
101- 120	73	34.8
121- 140	46	32.9
141- 160	39	26.6
161- 180	22	25.7
181- 200	19	25.7
201 and over	94	26.4
Total and average.	3,151	51.0

^a Thompson and Allin, *op. cit.*, p. 18.

The same general tendency toward regressivity was revealed, even more definitely and regularly than in the preceding table. Properties worth less than \$5 per acre were assessed at 158.8 per cent on the average; those worth from \$81 to \$100 per acre at 38.1 per cent; those over \$200 at 26.4 per cent.

Summary.—The data on assessment ratios in Louisiana were not presented in such form as to make a computation of the coefficient of dispersion, the index of individual inequality, possible. However, the findings of substantial inter-county inequality and pronounced regressivity lead to the conclusion that the state tax on real property is inequitably levied; that individual inequality is probably extensive; and that the tax burden is higher than it should be because of discrimination against those least able to pay.

Oklahoma

ASSESSMENT, REVIEW AND EQUALIZATION.—Real property is assessed biennially in Oklahoma by county assessors, who are elected by popular vote for a term of two years. They are compensated for their work on a full-time salary basis. Subject to consent by the county commissioners,¹⁵ they may appoint deputies to assist them. The county equalization is now performed by a tri-membered board composed of one member appointed by the county commissioners, one member by the district judge (or judges), and the third by the State Tax Commission.¹⁶ Appeals from the decisions of these boards may be taken, according to the law, to the State Board of Equalization, a body provided for in the Constitution, composed of the Governor, State Auditor, State Treasurer, Secretary of State, Attorney-General, State Inspector and Examiner, and the President of the Board of Agriculture.¹⁶ By a statute of 1931, however, the Oklahoma Tax Commission, composed of three members appointed by the Governor for terms coterminous with his, was created; and the books, records and employees of the ex officio board were transferred to the new commission.¹⁷ Thus the functions of the ex officio board provided for in the Constitution have been delegated by statute to the new appointive body, except that final approval must be given by the constitutional board. The state equalization is one of classes and counties.¹⁸

STATE SUPERVISION.—By the law which created it, the Tax Commission was given some slight power of supervision over local assessments, consisting chiefly in the authority to prescribe rules and regulations to govern the local officials in the performance of their duties. Further than this the legislature did not go, and legally authorized state supervision and control over local assessments is still very slight.

RECENT ASSESSMENT CONDITIONS.—Information with respect to assessment conditions in Oklahoma is not very extensive. Some ten years ago, when property tax administration was highly localized, and when the ex officio state board had not yet been superseded by the Tax Commission, the following comments were made in a study by Frederick E. Blachly and Miriam E. Oatman:

¹⁵ These boards were established by Session Laws of 1931, ch. 66, art. ii, approved April 10, 1931. The terms of all of the members are coterminous with that of the county commissioners. Before this law was passed, the county equalization was made by the county commissioners and the county assessor.

¹⁶ Constitution, Art. X, sec. 21.

¹⁷ Session Laws of 1931, ch. 66, art. i, approved January 19, 1931.

¹⁸ Oklahoma Statutes, 1931, sec. 12656. By Laws of 1933, H. B. No. 136, it was provided that the State Board of Equalization, upon recommendation of the Tax Commission, be authorized to raise or lower the assessed valuation of the property of any taxpayer having property of the value of \$30,000 or more. This act, however, when submitted to the people by referendum, was defeated, Aug. 15, 1933. Letter from Mr. John T. Bailey, Commissioner, Oklahoma Tax Commission, under date of June 19, 1934.

"The assessment of the general property tax is about as bad as it well could be.

"The county assessors, who are elected officials receiving small salaries, are almost without exception unqualified by business training or public administration for doing their work.

"Again, the state provides no administrative standards for local assessors. No lot and block maps, field books, valuation maps, or other aids, in valuing property are furnished. No rules are laid down as to what factors are to be taken into consideration in determining value, such as type of construction, depreciation, space, and the other generally accepted criteria."¹⁹

As for more recent evidence, the Oklahoma Tax Commission in its first report, after calling attention to the limited scope of the powers granted to it by the legislature, made an appeal for additional authority so that it might be able to remedy "the amazing and monstrous disparities that have been shown to exist in the assessment of properties of the same kind and class, in the several counties of the state."²⁰

Texas

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected by popular vote for a term of two years, and, in counties of less than ten thousand inhabitants, the county sheriff acting in an ex officio capacity, together with their deputies, annually assess the real property of Texas.²¹ Compensation for assessing is on a commission basis. Cities usually have their own elective assessors, but the office may be abolished by city ordinance. The commissioners of the county court sit as a county board of equalization, in which capacity they hear and decide complaints of taxpayers, and may make adjustments on their own motion. Appeals must be taken to the courts. There is no provision for a state equalization.

STATE SUPERVISION.—There is a State Tax Board, composed of the Comptroller, the Secretary of State and the State Tax Commissioner, but the work of this board with respect to *ad valorem* taxation is confined to the determination of the intangible values of railroads, ferries, toll bridges and oil pipe line companies.²²

¹⁹ F. E. Blachly and M. E. Oatman, *Some Problems in Oklahoma Finance*, Oklahoma Bureau of Municipal Research, Studies in Government and Administration, Number 4, November 1, 1924, p. 79.

²⁰ *First Annual Report of the Oklahoma Tax Commission*, January 1931—November 1932, p. 19.

²¹ By General Laws of 1933, ch. 197, the office of assessor and collector were merged; and it was provided that the assessor should be biennially elected in counties of 10,000 or more inhabitants, and that in the less densely populated counties the sheriff should serve as tax assessor and collector. Prior to this law, the sheriff had been ex officio tax collector.

²² Letter from Mr. Jerome Sneed, Jr., Delinquent and Intangible Tax Attorney, State Tax Board, under date of June 20, 1934.

State supervision and control is practically non-existent in Texas. With the exception of the prescription of forms and certain statistical and clerical matters, the state does not participate at all in the matter of assessments.²³

RECENT ASSESSMENT CONDITIONS.—*Individual Inequality.*—A recent ratio test of assessment inequality in Texas has been made by L. P. Gabbard.²⁴ Sales values were used as the basis of comparison, 917 rural transfers and 1,037 urban transfers constituting the sample. The rural transfers were of properties located in eight different counties; the urban, of properties in seven counties. When the ratios were computed and classified, the results were as shown in Table LXXIII.

TABLE LXXIII

RURAL AND URBAN DISTRIBUTIONS OF SAMPLE ASSESSMENT RATIOS
IN TEXAS, SHOWING RELATION TO VALUE OF PROPERTY^a

ASSESSMENT RATIO	RURAL		URBAN	
	Number of properties	Average sales price per property	Number of properties	Average sales price per property
1-10.	22	\$10,192.20	86	\$4,035.08
11-20	176	9,715.60	131	4,090.51
21-30	240	6,456.92	222	3,891.99
31-40	163	4,273.78	234	2,525.01
41-50	112	2,545.73	167	2,072.85
51-60	72	3,002.01	79	2,336.97
61-70	41	2,297.53	35	1,522.60
71-80	30	2,228.90	24	1,610.41
81-90	20	1,741.70	15	799.80
91-100	16	5,661.12	32	570.25
101 and over	25	1,132.52	42	728.76
Totals and averages	917	\$5,416.05	1,037	\$2,774.72

^a Source: L. P. Gabbard, *Inequalities in Taxation of Farm Lands and City Property Due to Scope and Method of Assessment* Texas Agriculture Experiment Station Bulletin 458, September 1932, p. 19.

As can be observed from inspection of this table, the ratios ranged from less than 10 per cent to over 100 per cent in the case of both the urban and rural properties. The coefficients of dispersion, computed by the writer on the basis of the facts of this table, were very high,—48 per cent in the case of the rural properties, 49 per cent in the case of the urban properties. These figures indicate an extremely inequitable assessment situation in Texas.

²³ Report of the Tax Survey Committee created by the 49th Legislature of Texas, 1920. In Supplement to the House Journal, 41st Legislature, p. 443.

²⁴ L. P. Gabbard, *Inequalities in Taxation of Farm Lands and City Property Due to Scope and Method of Assessment*, Texas Agriculture Experiment Station Bulletin 458, September 1932.

Rural-Urban Inequality.—With respect to the average degree of inequality as between urban and rural properties, the difference was negligible. The average ratio of assessment for the rural properties was 38 per cent; that for the urban properties, 39 per cent.

Regressivity—Much more significant was the indication of regressivity revealed by this study. Instead of reclassifying the data by value groups as is usually done in testing for regressivity, Gabbard computed the average sales price of each of the ratio classes of Table LXIX. If regressivity existed, the lower assessment ratio classes would be those of the more valuable properties. This was found to be very definitely the case. Rural properties assessed at a ratio of less than 10 per cent were worth \$10,192.20 on the average; those assessed at from 41 to 50 per cent, were worth \$2,545.73 on the average; those assessed at over 100 per cent, \$1,132.52. With few exceptions, a definite, pronounced and regular tendency toward regressivity was found. The same is true of the urban properties. Properties assessed at a ratio of from 1 to 10 per cent were worth \$1,035.08 on the average; those assessed at from 41 to 50 per cent, \$2,072.85; at over 101 per cent, \$728.76.

Inter-County Inequality.—In another part of this investigation, 2,808 rural transfers and 2,527 urban transfers were utilized in order to discover the extent of inter-county inequality. The facts were as shown in Table LXXIV.

TABLE LXXIV
AVERAGE ASSESSMENT RATIOS OF SAMPLE TEXAS COUNTIES, RURAL
AND URBAN

COUNTY	RURAL		URBAN	
	Number of properties	Average assessment ratio	Number of properties	Average assessment ratio
Collin	584	30.1	425	34.7
Dallas	239	15.7	289	36.6
Dawson	431	16.9	500	21.4
Harrison	462	40.8	416	40.1
Lubbock	156	28.2	511	33.2
Polk	443	46.8	.. ..	.. ..
Rockwell	219	27.4	219	30.3
Sutton	74	22.0	167	33.1

* Source: L. P. Gabbard *op. cit.*, pp. 20-21.

Exceedingly high inter-county inequality, due in part probably to the absence of any state equalization and supervision, was revealed. In Dallas county, the average rural assessment ratio was 15.7 per cent. In Polk county, it was almost three times as high, 46.8 per cent. The urban properties, while making a somewhat better showing on this score, were also assessed with

very great inter-county inequality. In Dawson, the average ratio was 21.4 per cent; in Harrison, 40.1 per cent, or almost twice as high.

Summary.—With these findings of glaring individual and inter-county inequality and pronounced regressivity in mind, we may well agree with the characterization of the assessment situation in Texas made by the Tax Survey Committee which reported in 1929: "The conditions in the State in the matter of the assessment basis of property are chaotic."²⁵

²⁵ *Report of the Tax Survey Committee, 1929, p. 15.*

CHAPTER X

THE MOUNTAIN STATES

Montana

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected for terms of two years and compensated on a full-time salary basis, together with their deputies, biennially assess the real property of Montana. There is an elaborate classification of property for purposes of taxation, real property being taxed on a 30 per cent basis of full cash value. The board of county commissioners sits as a county board of equalization, in which capacity it hears complaints of taxpayers, and may make adjustments on its own motion.

At the head of the system is a State Board of Equalization, which, in all respects except in name, is really a tax commission. It is composed of three full-time appointive members who must be such "as are known to possess knowledge of the subject of taxation and skill in matters pertaining thereto;" and has extensive power with respect to supervision over assessments, as well as equalization (by counties, classes and subdivisions of counties) and the hearing of appeals from decisions of the county boards.¹

STATE SUPERVISION: POTENTIAL.—The State Board of Equalization has general supervisory powers over the local officials; may prescribe rules and regulations to govern them; and has duties and powers in the matter of forms and reports. It may visit the counties whenever it deems it necessary, and may call meetings of the county assessor at the capitol for consultation and instruction. It is its duty to require enforcement of the law; may examine into cases of alleged violation; and may institute proceedings in the courts for the removal of assessors for official misconduct or neglect of duty. The power of reassessment is not specifically mentioned in the statutes, although it appears that the State Board probably possesses this power.²

¹ Since real property is classified into a number of subclasses in Montana (as is the general rule in this group of states), the power to equalize as amongst classes is of more significance than in states where equalization by classes is authorized by law but wherein real property itself constitutes a single class.

² Supplement to the Revised Codes of Montana, 1923-1927, secs. 2122.1-2122.8. Sec. 2122.8 (5) authorizes the State Board of Equalization "To adjust and equalize the valuation of taxable property among the several counties, and the different classes of taxable property in any county in the several counties and between individual taxpayers; supervise and review the acts of county assessors and county boards of equalization; change, increase or decrease valuations made by county assessors or equalized by county boards of equalization; and exercise such authority and do all things necessary to secure a fair, just and equitable valuation of all taxable property among counties between the different classes of property and between individual taxpayers."

STATE SUPERVISION: ACTUAL—The activities of the State Board of Equalization of Montana in the matter of assessment of real property are moderately extensive. They consist largely in the ordering of changes in connection with the state equalization, general advice to the local officials; visits; and conferences at the capitol.³

RECENT ASSESSMENT CONDITIONS.—Evidence on assessment inequality in Montana is not very abundant. In the Report of the Tax and License Commission to the State Board of Equalization in 1918, various comments having specific reference to the breakdown of the general property tax and the need for classification were made. These observations applied, in part, to the situation with respect to inequality of assessments of real property:

"This provision of our statute in regard to the assessment of all property at its full cash value has become a dead letter, not only in Montana, but in every state that has attempted it. Such a provision does not tend to the uniformity in taxation such as is contemplated by our Constitution. Instead of all property in Montana being assessed as its full cash value, we find a great lack of uniformity, not only as between different counties but also as between individuals, and almost a complete disregard of the statutory provisions relatively to full value."⁴

And further along in this report: "The Commission has made an exhaustive examination of the assessment of different counties of the state, and has found a great lack of uniformity. . . . There are great differences in assessments upon the same classes of property, and in fact it cannot be said there is any approach to uniformity."⁵

From these observations, and from other bits of evidence such as the recommendation of the State Board of Equalization in 1928 "that the office of Assessor should be one so provided as to invite and retain competent persons," we may conclude that assessment conditions in Montana are unsatisfactory.⁶ How unsatisfactory and how they compare with those of other states cannot be determined on the basis of this limited body of evidence. If we may infer that they are as inequitable as in other states of this region for which more abundant evidence is available, they are very inequitable.

³ Based on recent Reports of the State Board of Equalization and letter from Mr. Jas. H. Stewart, Chairman of the State Board of Equalization, under date of June 22, 1934.

⁴ *Report of the Tax and License Commission to the State Board of Equalization 1917-1918*, p. 10.

⁵ *Ibid.*, p. 11.

⁶ *Third Biennial Report of the State Board of Equalization for the Period July 1, 1926-June 30, 1928*, p. 15.

Wyoming

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected by popular vote for a two-year term of office and serving on a full-time salary basis, annually assess the real property of Wyoming. The statutes provide that the county commissioners divide the county into districts, and that the county assessor appoint a deputy in each district except his own. These deputies are compensated on a per diem basis. The board of county commissioners sits as county board of equalization, in which capacity it hears complaints of taxpayers and may make adjustments upon its own motion. Appeals from the decisions of the county boards of equalization may be taken to the State Board of Equalization, which as its name implies makes the state equalization. Although this equalization is wide in scope by law, including the possibility of adjustments as amongst individual properties, such individual adjustments are made only on appeal in practice.⁷ As in the case of Montana, the State Board of Equalization is comparable to the tax commissions or departments of other states. It is a full-time, appointive body, its three members being appointed by the governor for terms of six years.

STATE SUPERVISION: POTENTIAL.—The powers of supervision and control over the local assessment granted by law to the State Board of Equalization are extensive. It has general supervision over the local officials; is authorized to issue rules and regulations for their government, and to construe the tax laws for them. It is its duty to prescribe forms for and may require reports from them. It is directed to confer with, advise and instruct them as to the proper performance of their duties; and is required to visit each county annually in order to investigate their methods and learn whether they are faithfully discharging their duties. It may investigate cases of alleged impropriety or inequality; and may institute proceedings for the enforcement of the law, and for the removal of local officers for violation of it. With reference to the power of reassessment, which is not clearly granted by the statutes, the writer was informed as follows by the chairman of the State Board of Equalization:

"The State Board of Equalization when not satisfied with the assessment made by the Assessor would direct such Assessor to make a reassessment. There is no provision in our law for the State Board to employ agents of its own in such a matter although should a case arise where the assessor would not assess the property as we thought proper, undoubtedly we would assume the authority of assessing the same and issuing an order to the County Commissioners to place such assessments on the tax roll."⁸

⁷ Letter from Mr. C. H. McWhinnie, Chairman, State Board of Equalization of Wyoming, under date of July 6, 1934.

⁸ Letter from Mr. McWhinnie, cited above. Data on other powers of the State Board of Equalization from Wyoming Revised Statutes, 1931, ch. 115, secs. 511, 512.

STATE SUPERVISION. ACTUAL.—The activities of the State Board of Equalization in the matter of assessments are moderately extensive. They consist in equalization; aiding the local officials in the classification and valuation of lands; and general advice and guidance

RECENT ASSESSMENT CONDITIONS.—*Assessment Ratios.*—In 1931, the State Board of Equalization was provided with funds with which to make a state-wide investigation of property valuations. This investigation and the results thereof were described in the report of the State Board for 1931-1932 as follows:

"In April 1931, an investigation by our field representative was begun covering assessed valuations of rural and urban real estate, utilities and other properties.

"Assessment rolls of twenty-one counties were examined and data compiled covering valuations of farm and ranch property in these counties and the valuations of town lots and improvements in 41 of the 73 incorporated towns and cities within the State; this required the handling of approximately 100,000 assessment schedules and the making of plats of towns, where suitable plats were unobtainable, showing the assessed values of lots and improvements.

"A compilation was made of representative ranch and farm schedules for the purpose of determining the approximate average value of farm and grazing lands in the various counties, the better to enable the Board to suggest proportional equalization average values as between counties.

"This being a cross sectional study, values will fluctuate somewhat in an application of the total acreages and valuations to the results of this study. However, sufficient data has been compiled to demonstrate the absolute necessity of a complete survey and classification of all lands, town lots and improvements within the State if the problem of equalization in the various counties and as or between counties is ever reasonably satisfactorily solved."⁹

Assessment Practices.—Further data on assessment conditions in Wyoming are furnished in the *Report Made to the Special Legislative Committee on Organization and Revenue* made by Griffenhagen and Associates. Reprehensible practices such as farming out assessing to part-time deputies; roll-copying; horizontal changes; and general absence of modern assessing technique in the cities of the state were found and criticized.

The deputy assessors were found to work for only a few weeks in the year, and appointments to this office considered "political" jobs. Indeed, some of the assessors are reported to have stated that they do not even appoint the same deputies in successive years,

⁹ *Seventh Biennial Report of the State Board of Equalization, 1931-32*, pp. 9-10.

because of the need of passing the jobs around among the faithful of their political parties. Continues the report:

"Even if the assessors were all fully trained and experienced technicians, the practice of farming out the assessment work by districts to untrained deputies, selected largely for political reasons, and employed for short periods from year to year, would prevent uniform and consistent results.

"So many different assessing officers are concerned that a single standard of work among them is practically impossible. Each assessor is independent of every other, and there is no adequate supervision or review of results.

"In general, the assessors have expressed themselves as using their best judgment as to the value of individual properties in relation to other properties, taking into account all elements of value. No doubt the assessors do use their best judgment, and are doing the best they can under the circumstances. Some of them doubtless are doing a good job, or at least as good as could be expected in the absence of special training and of uniform rules or measures or guiding principles and procedures. But the whole matter of assessment, as can readily be seen, is largely a matter of the varying individual judgment of people without special experience or training except such as they may have secured in office, in this particular kind of work.

"To a large extent, in actual practice, the values of previous years are taken for subsequent years except as flat percentage reductions may be suggested by the state board of equalization or otherwise determined and applied, and except as adjustments may be decided upon by the individual assessors. Upon a change in office the new assessor often feels it incumbent upon him to apply his individual judgment to altering the valuations fixed by the individual judgment of his predecessor.

"The assessors are handicapped by the little attention that has been given to the scientific determination of what constitutes value for purpose of taxation. More attention should be given not only to the basic elements of assessment but to the simpler matters of method.

"In practically all the counties the assessment of city and town property is handled in a much more haphazard way than that of rural property. In only a few cases are adequate block and lot maps available for comparison of values of adjacent properties. In no instance has it been found that definite unit values have been established on a scientific basis to be applied by frontage or depth computation methods such as have been applied with signal success to urban assessments in numerous other states.

"In no case has it been found that standard values for typical buildings and structures have been established to which individual buildings and structures could be related as has been found an essential aid to uniform judgments elsewhere."¹⁰

¹⁰ Griffenhagen and Associates, *Report Made to the Special Legislative Committee on Organization and Revenue*, 1933, Vol. I, pp. 475-477.

Colorado

ASSESSMENT, REVIEW AND EQUALIZATION—The real property of Colorado is annually assessed by county assessors, elected for terms of two years and serving on a full-time salary basis. They may appoint deputies to assist them. Review and equalization are made by the county commissioners sitting in an ex officio capacity. Appeals from the decisions of the county boards of equalization may be taken to the Tax Commission or to the courts. Although there is an ex officio state board of equalization provided for in the Constitution, composed of the Governor, Auditor, Treasurer, Secretary of State and Attorney-General, the duty of making a state equalization has been largely transferred to the Tax Commission.¹¹ Up to the time of an adverse decision, *Union Pacific R. R. Co. v. Board of County Commissioners of Weld County*, it had been assumed that the scope of the state equalization was very wide, but in this case it was held that valuations of individual properties could not be changed.¹² However, real property is classified into various subclasses, and changes by such subclasses are authorized.

STATE SUPERVISION: POTENTIAL—The Colorado Tax Commission is composed of three members appointed by the Governor and State Treasurer to hold office for terms of six years. Its statutory powers and duties with respect to supervision of assessments are very extensive. It has general supervisory powers over the local officials, and is authorized to issue instructions to them. It is its function to prepare forms, tax schedules, tax rolls, field books, etc. for them, and may require reports from them. It must hold an annual meeting with the county assessors at the capitol, and may call group meetings at times and places designated by it. It is directed to investigate the work and methods of local officers and for that purpose one or more members of the commission must visit at least one-half of the counties of the state annually, and every county in the state at least once in two years. It has the power to file charges with the Governor against assessors for removal from office for wilful omission of property or wilful refusal to assess at true value. It may order local assessors to reassess and is authorized to make reassessments with its own appraiser or appraisers.¹³

STATE SUPERVISION: ACTUAL—The activities of the Colorado Tax Commission with respect to supervision of assessments include visits by a field investigator and the members of the commission; annual state conference of assessors and district meetings; and general advice and guidance. Reassessment orders have been made at various times, but the commission has been unable to make

¹¹ Constitution, Art. X, sec. 15; also Courtright's Mills Annotated Statutes of Colorado, 1930, sec. 6333.

¹² 35 Fed. (2nd Series) 785, (1929). Letter from Mr. E. B. Morgan, Chairman of the Colorado Tax Commission, dated July 15, 1934.

¹³ Courtright's Mills Annotated Statutes of Colorado, secs. 6294-6306.

reassessments with its own appointed appraisers because of the lack of funds and personnel necessary to undertake such work. Thus far, only one county has been reassessed by the commission.¹⁴

RECENT ASSESSMENT CONDITIONS—*Individual Inequality*.—A ratio test of assessment inequality in Colorado was made in a study of tax problems in this state by Coombs, Moorhouse and Seeley.¹⁵ Owners' estimates of value were taken as the basis of comparison; the sample consisting of 420 rural properties, as of 1925-1926, and 205 urban properties, as of 1926. The average assessment ratio of the various districts of the state, and the range of the ratios in each, were as presented in Table LXXV

TABLE LXXV

AVERAGES AND RANGES OF SAMPLE ASSESSMENT RATIOS IN COLORADO, 1925-1926, BY DISTRICTS^a

DISTRICT	RURAL (1925-1926)				URBAN (1926)			
	Number of properties	High	Low	Average	Average	Low	High	Number of properties
Northern Colorado	359	531.6	14.6	64.7	46.4	19.5	99.3	38
Arkansas Valley	10	71.3	22.4	40.1	132.8	83.2	232.9	28
San Luis Valley	21	122.8	29.0	40.7	57.1	32.9	83.3	21
Western Slope	30	117.5	21.0	17.0	76.8	16.9	193.6	90
Plains					66.8	30.3	98.4	28
Totals and averages	420	531.6	14.6	61.0	63.6	16.9	232.9	205

^a Source: W. Coombs, L. A. Moorhouse, B. D. Seeley, *Some Colorado Tax Problems with Special Reference to their Effect on Agriculture*, Colorado Agricultural Experiment Station Bulletin 346, Sept. 1928, pp. 41-43.

As can be observed from an examination of this table, the ratios ranged from 14.6 per cent to 531.6 per cent in the case of the rural properties; and from 16.9 per cent to 232.9 per cent in the case of the urban. The coefficients of dispersion, which have been computed by Marlin and Stephenson on the basis of the facts of this investigation, are better indices to the degree of assessment inequality. For the rural properties, the coefficient of dispersion was computed to be 36.06 per cent, for the urban, 39.31 per cent. These figures indicate a very high degree of assessment inequality in Colorado.

¹⁴ Based on recent reports of the Colorado Tax Commission and letter from Mr. E. B. Morgan, Chairman of the Colorado Tax Commission, under date of June 15, 1934.

¹⁵ Whitney Coombs, L. A. Moorhouse and Burton D. Seeley, *Some Colorado Tax Problems with Special Reference to Their Effect on Agriculture*, Colorado Agricultural Experiment Station Bulletin 346, Sept. 1928, pp. 40-44.

Rural-Urban and Inter-District Inequality.—The average assessment ratio for the rural properties did not vary much from the average urban ratio, the figures being 61.0 per cent and 63.6 per cent respectively. Hence, little inequality on this score was found. However, there were very considerable variations amongst the district averages, the San Luis Valley district having an average rural ratio of 40.7 per cent, while the Northern Colorado district was assessed at an average of 64.7 per cent. Far greater inter-district inequality was found as amongst the urban ratios, the Arkansas Valley district being assessed at an average ratio of 132.8 per cent and the Northern Colorado district at 46.4 per cent at the extremes. It should be noticed, however, that the number of cases on which these district averages have been computed are often too small to be anything but barely indicative.

Assessment Practices—In addition to this evidence on assessment inequality, the following description of assessment practices in Colorado by Prof. Jens P. Jensen throws further light on assessment conditions in this state:

“Away from the large cities, ordinarily no systematic records of the sales are kept by the assessors, and the appraisal is made more or less as a matter of guess work, except in so far as the value is deliberately kept the same from one assessment year to another. The result is that there are great inequalities not only among the individual properties within each tax district, but in the average ratio of assessed to true value as between counties.”¹⁶

Further along in the survey, Prof. Jensen observes: “The inequalities in the assessments of individual items within each county and the discrepancies among counties are due only in part to chance variations, but are in part deliberately intended. . . . The assessors often state that they try to discover what the average ratio is for the state, and to be guided in their work by that ratio. Sometimes for election purposes, they boast that they have kept the average ratio for the home county down below the state average, and thus saved for the taxpayers a part of the state tax.

“Another prevailing practice leads even more surely to inequalities. It is common for the assessors to keep the valuation of individual parcels fairly steady from year to year, so as not to necessitate changes in the tax rates. The result is that the valuation of individual properties is kept relatively uniform, regardless of changes in individual values, or in the correctness of the original assessment. Such a procedure is bound to produce inequalities in the assessment, since the changes in value of individual properties are not uniform.”¹⁷

And finally: “That there are other causes of the inequalities in the assessments is certain. There is ignorance and carelessness, and perhaps favoritism for political and other reasons. But there

¹⁶ Jens P. Jensen, *Survey of Colorado State Tax System* (Made under the Auspices of the Denver Chamber of Commerce, 1930), p. 53.

¹⁷ *Ibid.*, pp. 86-87.

is in nearly all counties, except Denver, and possibly a few other counties, an absence of reliance upon anything but 'rule of thumb.'¹⁸

Summary.—On the basis of the results of the ratio test made in the Coombs-Whitney-Seeley study, and the description of assessment practices made by Prof. Jensen, it may be concluded that administration of the real property tax in Colorado is very poor indeed.

New Mexico

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected for terms of two years and compensated for their work on a salary basis, together with their deputies, quadrennially assess the real property of New Mexico.¹⁹ In 1929, it had been provided that assessments be made by county boards of tax appraisers, composed of three members: the county assessor; a person appointed by the board of county commissioners; and one member appointed by the State Tax Commission.²⁰ However, these boards were abolished in 1933 and the county assessors again constitute the primary base of the New Mexico system.²¹ The county commissioners sit as a county board of equalization, in which capacity they hear and decide complaints of taxpayers with power to make adjustments on their own motion. Appeals from the decisions of the county boards of equalization may be taken to the State Tax Commission. There is no provision for a state equalization.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members, appointed by the Governor with the consent of the Senate for terms of six years. Only the president, entitled the Chief Tax Commissioner, is a full-time officer, the other two members being compensated on a per diem basis. Although it is not authorized to make a state equalization, the statutes give it extensive powers of supervision and reassessment in addition to the appellate function mentioned above. The commission has general supervisory powers over local officials; may require reports from them; and is empowered to confer with, advise and direct them in the performance of their duties. It is to hold conferences for their instruction and may assist the county in making assessments. It is authorized to make investigations of assessment conditions. It may make reassessments with its own appointed agents. It does not have the specific power of removal, but it is authorized to institute proceedings in the courts to enforce the laws imposing penalties and punishment on public officers.²²

STATE SUPERVISION: ACTUAL.—The State Tax Commission of New Mexico has made some valiant attempts to better assessment con-

¹⁸ *Ibid.*, p. 88.

¹⁹ Prior to Laws of 1933, ch. 86, assessments were made annually.

²⁰ Laws of 1929, ch. 84. The appointive members had been compensated on a per diem basis.

²¹ Laws of 1933, ch. 4.

²² New Mexico Statutes Annotated, 1929, ch. 141, secs. 507-508.

ditions in this state. Some years ago, it attempted a policy of reassessment in co-operation with the counties. The plan called for an equal number of representatives of the Tax Commission and the county, the county paying 80 per cent of the costs, the state 20 per cent. The program began auspiciously, but came to grief with the realization of reassessing counties that they would not only be better assessed, but also assessed proportionately higher for purposes of the state levy, unless the whole state were reassessed.²³ The experiment of having a county board of tax appraisers, of which one member was a representative of the State Tax Commission, did not work out well either. The experiment was apparently a compromise plan between the wishes of the Tax Commission for centralization and the opponents of centralization. The Tax Commission recommended the abolition of these boards after a brief trial.²⁴ At the present time the State Tax Commission participates actively in the valuation of one type of land, grazing land, setting the values by subclasses. With respect to the other classes of real property, its participation appears to be slight.

RECENT ASSESSMENT CONDITIONS—It is very probable that the description of assessment conditions in the Report of the New Mexico Special Revenue Commission of 1920, to which Prof. R M Haig served as special counsellor, still applies.

"In spite of material advancement brought about since the establishment of the state tax commission, assessments are still inaccurate and incomplete. . . . The witnesses who appeared before us were unanimous in their testimony that the system of locally elected county assessors had broken down; that the assessors were ordinarily chosen for considerations quite apart from their technical qualifications or efficiency; and that, in short, the office had become a political football. Although there are occasional officials who are both able and industrious the great majority appear to be either inefficient or negligent or both. One case was cited of an assessor who had been out of his county for nearly a year. The actual assessment is often delegated to a deputy, paid by the county, and the work usually consists of the mere mechanical copying of the rolls of the previous year. The assessors are often without aids to assessment such as maps and charts. No provision is made for the expenses of field work and consequently, even in

²³ *Seventh Biennial Report, 1926-1928, p. 6 et seq.*

²⁴ In 1920, the Special Revenue Commission of New Mexico had recommended state administration of assessments. In its *Seventh Biennial Report (1926-1928)*, the State Tax Commission had recommended the adoption of one of several alternatives: (1) the appointment of assessors by the Tax Commission upon recommendation of the county boards; (2) a system of extensive state supervision with eight or more supervisors, each to have four counties; (3) appointment of assessors by county boards after qualification by written and oral examination. In the *Ninth Biennial Report (1930-1932)*, it had recommended that the county boards of tax appraisers be abolished, and that a complete state-wide survey of real property be made and valuations changed every four years.

the case of real estate, the assessor does not ordinarily view the property personally in order to arrive at a valuation for tax purposes."²⁵

Arizona

ASSESSMENT, REVIEW AND EQUALIZATION.—Assessments of real property in this state are made annually by county assessors and their deputies. The former are elected by popular vote for a term of two years, and are compensated for their work on a salary basis. Three special charter cities, namely, Phoenix, Yuma and Prescott, have their own assessing organizations. The county board of supervisors sits as a county board of equalization, in which capacity it has the power to make adjustments on its own motion as well as on complaint of taxpayers. Appeals may be taken both to the courts and to the State Tax Commission. The latter makes the state equalization. This equalization is extensive in scope by law, including adjustments as amongst individual properties, as well as amongst cities, towns, counties and classes. (Real property is sub-classified in this state.)

STATE SUPERVISION: ACTUAL.—The State Tax Commission is composed of three members, not appointed by the Governor as is the usual practice, but elected by popular vote (for terms of six years). However, since it is required by law that its members are to possess knowledge and experience in the subject of taxation, and since they are full-time officials, the commission is similar to other state tax commissions in all other respects. Its statutory powers and duties in connection with supervision over assessments are extensive. It has general supervisory powers over the local officials; is directed to provide forms and tax rolls; and may require reports. It is required to hold conferences at least once a year with the county assessors for their instruction and guidance. It may visit the counties in order to inspect their work as often as it deems necessary. It is authorized to investigate any matter of taxation, and to examine into cases where violation of the law is alleged. It has the power to institute proceedings in the courts for the removal of assessors for official misconduct or neglect of duty. It does not have the power to order or make reassessments, but may order any county board of equalization to reconvene and to make changes with respect to the valuation of any person or any class of property.²⁶

STATE SUPERVISION: ACTUAL.—At various times, a rather high degree of state leadership in assessments has prevailed in Arizona. In 1913, the State Tax Commission had obtained the co-operation of county and city officials in making a reappraisal, by a valuation expert, of all the city and town property in the state. This reassessment had been confined to urban properties, and to site values only.²⁷

²⁵ *Report of the New Mexico Special Revenue Commission*, 1920, p. 20.

²⁶ Revised Code of Arizona, 1928, secs. 3056-3061.

²⁷ *Second Biennial Report of the State Tax Commission*, Dec. 28, 1914, pp. 12-13.

In 1929, the State Tax Commission was designated a Board of Tax Survey, given original jurisdiction in fixing valuations for all classes of property and \$30,000, to enable it to make reappraisal of the property in the state.²⁸ The law contemplated a permanent fundamental change, namely the establishment of state reassessment every five years. However, difficulties soon began to appear. The sum was not sufficient for a thorough and complete revaluation of all classes of property. Moreover, the law provided that the survey had to be completed by January 1, 1930. Hence, the Tax Commission, or rather Board of Tax Survey, decided to confine its activities to real property only. This, in itself, would not have been fatal to the experiment, since much good could have been accomplished in the improvement of assessments of this very important class of property. However, this decision of the board proved to be unfortunate in that it opened a legal loophole to those opposed to the reassessment. When the reassessment was completed, the opponents of the revaluation attacked it on the ground that since all classes of property in the State had not been revalued, that therefore the revaluation so made was incomplete, discriminatory and invalid. These contentions were sustained by the courts.²⁹

The net result was that the valuation of the board was not compulsory upon the county boards of equalization, and that if they so desired, they could re-establish the values as set by the county assessors.

It is the opinion of the State Tax Commission that the resurvey was not entirely in vain. In its *Tenth Biennial Report* (for the year ending Dec. 31, 1930) it stated: "This Commission believes, however, that the money spent in trying to establish a reappraisal of realty values has not been a loss, for there has been created in the state a 'Tax Conscience' and if they will follow it up and make thorough study of the existing condition, it is bound to result in a great deal of good."³⁰

Thus far no successful follow-up has been made. In 1931, the legislature passed a measure to be submitted to referendum vote providing for an elaborate economic and fiscal survey of the state (Laws of 1931, ch. 103). The State Tax Commission was to be designated a Board of Tax Survey, with an appropriation of \$250,000 for the work. This survey was to be far more extensive than that of 1929. It contemplated a comprehensive inventory of the income and property of the people and businesses (including corporations and public utilities); and a compilation of the business transactions and receipts and expenditures of the state government and its subdivisions. All of this material was to be made the basis of a reorganization of the fiscal system of the state, the valuation for assessment purposes being one aspect of it. This referendum was defeated at the polls, November 2, 1932.

²⁸ Laws of 1929, ch. 46.

²⁹ *Oglesby v. Chandler*, 37 Ariz. 1 (1930).

³⁰ *Tenth Biennial Report of the State Tax Commission of Arizona*, Dec. 31, 1930, p. 14.

ASSESSMENT INEQUALITY.—During the state survey of 1929, many cases of inequality and of complete omission were discovered. Mr. E. A. Hughes, a member of the State Tax Commission at the time that the revaluation was being carried on, made the following observations on the findings of that body during the course of the work.

"We have found property assessed at 10 per cent of its value, and other property at over 100 per cent of its actual value. We have found farm land that has been in cultivation for two years and more lying along one of the main paved state highways assessed at \$15.00 per acre, while other lands in the same project farther away from the source of water supply and no better in quality assessed at from \$30.00 to \$50.00 per acre. We have found some lands which were classified as slick lands carried at \$1.00 an acre although planted to and growing a crop, though of course not as good as surrounding lands. In one instance forty acres out of a 160 acre tract was carried as such. We have found lands that have sold for \$750.00 to \$1,000.00 per acre assessed at \$135.00, homes that have cost from \$20,000.00 to \$30,000.00 carried on the assessment rolls at \$3,000.00 or \$4,000.00. There will also be quite a pick up on property that has never been on the assessment rolls at all. For instance in one small town in Maricopa county, the records showed 58 pieces of improvements assessed, while our field man actually measured up 101."

* * *

"We could go on and point out hundreds of other discrepancies and inequalities which we have been able to iron out."³¹

Utah

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected by popular vote for terms of four years, and serving on a full-time salary basis, together with their deputies, make both the rural and urban assessments of real property in Utah. Real property is assessed annually. The board of county commissioners sits as a county board of equalization, in which capacity it hears and decides complaints of taxpayers and may make adjustments on its own motion. Appeals from the decisions of the county board may be taken to the State Tax Commission, which also makes the state equalization, by classes and counties. (Real property is subclassified.)

STATE SUPERVISION: POTENTIAL.—The State Tax Commission, which superseded the former appointive state board of equalization, was established in 1930.³² The present commission is composed of four members, two of which are full-time, two part-time, appointed

³¹ E. A. Hughes, Address delivered at the Twenty-fourth Annual Convention of the Arizona Cattle Growers' Association, *Arizona Taxpayers' Magazine*, March 1930, pp. 5-6

³² Constitution, Art. XIII, sec. 11, as amended Nov. 4, 1930.

by the Governor with the advice and consent of the Senate for terms of four years.³³ The statutory powers and duties of the state tax officials with respect to supervision over assessments are, since the recent reorganization, very extensive. The State Tax Commission has general supervisory powers over the local officials; is authorized to confer with, advise and direct them; and may prescribe rules and regulations to govern them. It is directed to prepare and enforce the use of forms for, and may require reports from them. It is its duty to visit each county annually (oftener if necessary) for investigation of the work and methods of the county officials and for the direction thereof. It is authorized to hold state or district conferences with the assessors at such times and places as may be deemed necessary. It is empowered to order any county board of equalization to reconvene in order to make corrections. It is authorized to examine into cases where violation of the law is alleged. It may institute proceedings in the courts for the removal of local officials for failure or neglect to comply with the laws. It may order the county assessors to reassess and may make reassessments with its own personnel.³⁴

STATE SUPERVISION: ACTUAL.—The new State Tax Commission of Utah participates actively in the matter of assessments of real property. It has very vigorously exercised its power to reassess, the reassessments being made in co-operation with the county officials by a corps of engineers. A very substantial portion of the buildings of the state has been reassessed in this manner. In some of the counties, the commission has assisted in the reclassification and revaluation of rural lands. Moreover, supervision and advice have been extensive. The present Tax Commission of Utah is one of the most energetic in the country with respect to participation in real estate assessments.³⁵

RECENT ASSESSMENT CONDITIONS.—The formidability of the task of the new State Tax Commission inherited from the operation of the old *regime* is evidenced by the following observations, recently made by the commission:

“The investigations made by the Tax Commission during the past two years indicate that the necessity for equalization of assessments is not confined to equalization between counties. If it were, the problem would be tremendously simplified. Given a reasonably good initial assessment by the county assessor and the task of relating and comparing it to similar assessments in other counties

³³ By Laws of 1931, ch. 53 all of the four members were full-time, but this was superseded by Laws of 1933, ch. 59, which provided for the present organization.

³⁴ Revised Statutes of Utah, Annotated, 1933, Title 80, c^h. 5, secs. 37–51.

³⁵ Data from address by Mr. R. E. Hammond, Commissioner, State Tax Commission of Utah, “Rebuilding Utah’s Tax System” delivered at the Twenty-Sixth Conference of the National Tax Association, *Proceedings of the National Tax Association*, 1933, p. 63 *et seq.* and letter from Mr. Hammond dated June 16, 1934. Up to June 16, 1934, the buildings in nine of the twenty-nine counties had been reassessed.

does not present the difficulties that are found in the situation which undoubtedly exists at this time, the correction of which the commission considers of paramount importance; namely haphazard assessments in many of the counties, with ratios of assessed values to true values ranging in particular instances from nothing to 400 per cent. This is literally true, as anyone who will take the time to investigate can prove to his complete satisfaction.³⁶

Nevada

ASSESSMENT, REVIEW AND EQUALIZATION—County assessors, elected by popular vote for terms of four years, together with their deputies, annually assess the real property of Nevada. The county commissioners sit as a county board of equalization, in which capacity they hear and decide complaints of taxpayers and may make adjustments upon their own motion. Appeals from the decisions of the county boards may be taken to the Tax Commission or to the courts. The former makes the state equalization.³⁷ This equalization is extensive in its statutory scope, including adjustments as amongst classes and individual properties.

STATE SUPERVISION: POTENTIAL—The Nevada Tax Commission is not a full-time administrative body. The Governor (who is chairman) and the appointive full-time member of the Public Service Commission serve ex officio, five other members serving on a part-time basis. Of these five, one commissioner is required to possess a practical knowledge of and experience in land classification and land values; one is to be a specialist in live stock; another in mining; another in business; another in banking. Their term of office is four years. There is a full-time secretary. The statutory powers and duties of the Tax Commission with respect to supervision over local assessments are extensive. It has general supervisory powers over the local officials; is empowered to confer with, advise and direct them as to their duties; and to establish general rules and regulations to govern them. It is authorized to prescribe assessment forms and blanks, and may require reports. It is its duty to make investigations of property escaping taxation, and to require local officers to place same on the rolls. It has the power to institute proceedings against violators of the law, and since county officers may be removed from office by the circuit court for refusal or neglect to perform any official act in the manner and form prescribed by law, apparently may institute proceedings for removal in such cases. The power of reassessment is not specifically mentioned in the statutes. It is the opinion of the Tax Commission, however, that it has the authority under the law to make reassessments with its own personnel.³⁸

³⁶ *First Biennial Report of the Utah Tax Commission, 1931-1932*, pp 11-12.

³⁷ Prior to Laws of 1933, ch. 176, the state equalization was made by the Tax Commission sitting with the county assessors as a state board of equalization.

³⁸ Nevada Compiled Laws, 1920, secs. 6542, 6544 (and 4860). Letter from Mr. W. D. Atkinson, of the Nevada Tax Commission, under date of June 22, 1934.

STATE SUPERVISION: ACTUAL.—The Nevada Tax Commission has frankly stated a common attitude of tax commissions on state supervision of local assessments, although seldom so bluntly expressed, when it stated in a letter to the writer, "These powers are exercised whenever it is deemed necessary, however, it is the attitude of the Commission to interfere as little as possible with the powers and authority granted to the county assessor."³⁹

RECENT ASSESSMENT CONDITIONS.—No detailed analysis of assessment conditions in this state has been prepared to the knowledge of the writer. However, some comments made by a former member of the State Tax Commission shed light on the present state of affairs:

"It stands to reason then, that in order to make an equitable distribution of the tax burden the tax roll should be . . . sensitive. It should respond readily to the upward and downward trend in basic values.

"That this condition does not prevail is evidenced by the fact that the rolls are replete with hereditary values which were determined at such remote periods that the men who were responsible for them have been forgotten.

"Individual statements are recopied from year to year with the result that in thousands of instances, upon property which is rapidly enhancing in value, the burden becomes negligible. Its opposite effect is actually to increase the load upon those whose property is not worth what it was a few years ago. A great number are unduly overtaxed and a greater number inexcusably under-taxed."⁴⁰

Idaho

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors elected by popular vote for terms of four years and serving on a full-time salary basis, together with their deputies, annually assess the real property of Idaho. The county commissioners, as is typical in this section of the country, sit as a county board of equalization. In this capacity they hear and decide complaints of taxpayers, and may make adjustments upon their own motion. Appeals from the decisions of the county board lie to the courts. The state equalization is made by an *ex officio* board provided for in the Constitution, composed of the Governor, Secretary of State, Attorney-General, State Auditor and State Treasurer.⁴¹ Its scope is limited to adjustments by counties and classes. (Real property is subclassified in Idaho.)

³⁹ Letter from Mr. W. D. Atkinson, of the Nevada Tax Commission, under date of June 22, 1934.

⁴⁰ P. Y. Gillson, address at conference of county commissioners. Quoted in the *Nevada Tax Review*, No. 30, Feb. 1932, p. 5.

⁴¹ Constitution, Art. 7, sec. 12. By a law passed in 1931, it was proposed to amend the Constitution by substituting a provision for the establishment of an appointive tax commission to supersede the *ex officio* state board of equalization, but this proposed amendment was defeated at the polls. S. L. 1931, p. 461. Defeated Nov. 8, 1932.

STATE SUPERVISION: POTENTIAL.—Prior to 1933, the statutes made little provision for state supervision and control over local assessments. In 1933, a law was passed enabling the State Board of Equalization to investigate assessments and compel reassessments if deemed necessary.⁴² Another law of that year conferred certain supervisory powers upon the Department of Finance. It was given the authority to confer with and advise local officials; to investigate assessments and report its findings to the State Board of Equalization; and to institute proceedings in the courts for the removal of assessors for official misconduct or neglect of duty.⁴³

STATE SUPERVISION: ACTUAL.—It is too early to make any conclusions as to the actual degree of central control over the local assessment which may result from the 1933 legislation. The Commissioner of Finance has received only a very small appropriation and has not made any substantial efforts toward the establishment of vigorous state supervision as yet.⁴⁴

RECENT ASSESSMENT CONDITIONS.—There is very little published material on assessments in Idaho. In reply to an inquiry made by the writer, the State Auditor, who is Secretary of the State Board of Equalization, stated:

“The Federal Emergency Relief Administration is at the present time at work on a state-wide project to gather information for the State Board of Equalization regarding the actual and true value of urban and rural property from the standpoint of its utility. Many interesting facts hitherto unknown are being disclosed which we are certain that in the end will display the irregularity and erroneous assessments which have been returned by county assessors.”⁴⁵

⁴² Laws of 1933, ch. 140.

⁴³ Laws of 1933, ch. 146.

⁴⁴ Letter from Mr. Harry C. Parsons, State Auditor and Secretary, State Board of Equalization of Idaho, under date of June 25, 1934.

⁴⁵ Letter from Mr. Harry C. Parsons, State Auditor and Secretary of the State Board of Equalization of Idaho, under date of June 25, 1934.

CHAPTER XI

THE PACIFIC STATES

Washington

ASSESSMENT, REVIEW AND EQUALIZATION.—Except for the two counties which have township organization and township assessors, the biennial assessments of the real property in Washington are made by county assessors, who are elected by popular vote for a two-year term of office. Provision is made for the appointment of deputies. Certain cities may have separate assessment organization, but even in this case the county assessor acts as city assessor *ex officio*. The county assessor serves on a full-time salary basis, except that in some counties he is also county treasurer. Real property is assessed at a legal ratio of 50 per cent of its true value. Review and equalization are made by the county commissioners. In cities of the first and second classes, the city council selects a committee of three from its membership to sit with them. In the two counties which have township organization, the chairman of the township supervisors selects a committee of three to sit with the board. Appeals from the decisions of the county boards of equalization may be taken to the State Tax Commission. This body makes the state equalization, by counties and classes.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members appointed by the Governor with the consent of the Senate for terms of six years. Its powers of supervision and control are apparently extensive, although there is some question as to the more drastic powers. It has general supervisory powers over the local assessing and equalizing officials, may promulgate rules and regulations for their government; is authorized to prepare blank forms for and may require reports from them; and is directed to hold annual conferences at the capitol. It is authorized to order the county boards of equalization to reconvene and make changes. It is given the power to make reassessments by the statutes, although there appears to be some doubt as to the validity of this grant by the legislature.¹ There

¹In answer to an inquiry concerning the existence of and utilization by the Washington Tax Commission of the power of reassessment, the writer was informed as follows: "The question you present as number two, is very difficult to answer. The original Tax Commission Act of 1925, as amended, apparently gives the tax commission power to either order reassessments by local assessors or to make reassessments using its own employees or appointees. However, our 1931 Legislature enacted a law dealing specifically with the 'reassessment and retaxation of property' . . . Under this last mentioned act, the tax commission made certain reassessments, somewhat in the nature of a test. Upon the basis of these reassessments, the constitutionality of the act was called into question with the result that the court declared that 'insofar as it provides that the State Tax Commission may reassess for local taxation purposes property within a county, city, town or other municipal corporation, Chapter 106, Laws of 1931, is un-

is also some doubt as to the power of removal, although the Tax Commission most probably possesses this power.²

STATE SUPERVISION: ACTUAL.—Whatever the exact legal situation may be with respect to the reassessment and removal powers, the actual policy of the Tax Commission makes little use of them. The activities of the Tax Commission are of an educational and assisting rather than compulsory nature. It holds annual conventions with the assessors for purposes of stimulation and instruction and assists in the appraisal of difficult properties. It has never attempted to remove an assessor or any other official from office.³

RECENT ASSESSMENT CONDITIONS.—*The Report of the Department of Taxation and Examination in 1924*—For the years 1921 to 1924, inclusive, the Division of Taxation in the Department of Taxation and Examination (then the head of the state tax system), collected and compiled some 17,685 transfers of urban property and some 12,049 transfers of rural property. The assessed valuations and sales considerations were aggregated by counties, and an average assessment ratio computed for each county. When these ratios

constitutional.' In rendering this decision, the Supreme Court employed much language and dicta that at first seemed to becloud many of the powers reposed in the tax commission by the 1925 act. Since the rendering of this decision, however, certain other decisions apparently disclosed a tendency upon the part of our Supreme Court to recede, if the word may be employed, from some of the conclusions derivable from the aforementioned dicta and to confine itself quite strictly to the actual holding of the court above quoted, which simply held Chapter 106, supra, to be unconstitutional." Letter from the Washington Tax Commission, under date of June 26, 1934. Ch. 106, Laws of 1931, relating to the "reassessment and retaxation of property" was declared invalid insofar as taxation for county, town or city purposes was concerned by *Tax Commission et al v. Redd*, (1932), 6 Pacific (2nd) 619.

² On this point, the writer was informed as follows. "As to your third question, it appears to us that the tax commission is empowered to cause the removal from office of local assessors for 'official misconduct or neglect of duty.' Section 21 [of the revenue laws] confers power on the Tax Commission to enforce compliance with its orders. Section 25, subdivision 4th, apparently sets up a 'removal process.' Section 139 provides for certain additional penalties to be imposed on county officers, for failure to perform their duties. There appears to be, however, some slight question concerning the present validity of Section 25, supra. We believe that this section to be still in effect, but there is some holding by attorneys that this section is superseded by Chapter 18 of the Laws of Washington, 1925, which last mentioned chapter in the 1925 Tax Commission Act." Letter cited above. [Under the Law of 1917, the Director of Taxation and Examination was authorized to institute proceedings for removal. One of the provisions of the 1925 act transferred all the powers of this official except those relating to banking and savings and loan associations to the new Tax Commission. In this act of 1925, however, the power of removal was not specifically mentioned. The Tax Commission was authorized only to apply to a judge of the Superior Court for an order to a county assessor disobeying its instructions to compel obedience, the assessor having the right to show cause why such instructions should not be obeyed.] The powers and duties of the Washington Tax Commission are set forth in Remington's Revised Statutes of Washington Annotated, 1931, secs. 11091, 11092, 11102, 11140, 11301-11308.

³ Data from recent reports of the Washington State Tax Commission and letter under date of June 26, 1934, cited above.

are classified they show considerable variations. Table LXXVI shows the results of a classification for the latest year only, namely 1924.

TABLE LXXVI

RURAL AND URBAN DISTRIBUTIONS OF AVERAGE ASSESSMENT RATIOS OF WASHINGTON COUNTIES, 1924^a

ASSESSMENT RATIO	NUMBER OF COUNTIES	
	Urban	Rural
10-14 9	.	1
15-19 9	.	3
20-24 9	4	11
25-29 9	15	12
30-34 9	12	8
35-39 9	3	3
40-44 9	3	1
45-49 9	1	.
50-54 9	.	.
55-59 9	.	.
60-64 9	1	.
Totals	39	39

^a Based on Washington Department of Taxation and Examination, Division of Taxation, *First Biennial Report*, for the period ending September 30, 1924, p. 6.

The average county ratios for the urban properties ranged from 20.89 per cent in the county of Skamania to 63.65 in Ferry. The rural ratios ranged from 13.10 per cent in Mason to 42.45 per cent in Ferry.

No data were furnished as to the exact extent of the average amount of inequality as amongst individual properties. However, the following summary of the results of the investigation is indicative of a very inequitable situation:

"After four years' experience in field examinations, the Department has come to realize that the 50 per cent assessment law of 1919 is not enforced within an approximation of 15 per cent, that the average state ratio of assessed to actual value of the general property, considering every factor that may not appear in the deed records, is not to exceed 35 per cent; that the assessment is shot through and through with inequalities; that it lacks uniformity, in that in many instances discrimination is practiced in shifting the load, and that if the enforcement of the 50 per cent law is to be promoted, the tax department will have to be fortified with controlling authority, and reappraisal of the state provided for by a liberal legislative appropriation."⁴

The Report of the Investigation Commission of 1930.—In 1925, the department was organized and broader powers were conferred

⁴ Department of Taxation and Examination, Division of Taxation, *First Biennial Report*, for the period ending Sept. 30, 1924, p. 5.

upon it, including the power to order reassessments. In 1930, the Tax Investigation Commission reported that conditions were still very bad and expressed doubt as to the possibility of relief by minor reforms. "The variations in assessment in the several counties," it declared, "resulting from the lack of co-ordination in the work of 39 county assessors and 73 township assessors over a long period of years are too great to be removed within a reasonable time by present methods."⁵

The United States Forest Taxation Inquiry Study.—Further evidence on assessment inequality in Washington is provided by a study in one of the Progress Reports of the United States Forest Taxation Inquiry.⁶ Sales prices of 213 properties situated in the county of Grays Harbor were compared with the corresponding assessed valuations. The resulting ratios showed a coefficient of dispersion of 53 per cent, indicating an extremely bad situation. When these properties were classified by types of property, as in Table LXXVII, very wide variations were revealed as amongst the average ratios. Farm property was assessed at an average ratio of 28 per cent; cut-over land at almost twice this ratio, 54 per cent; and merchantable timber land at 72 per cent.

TABLE LXXVII

AVERAGE ASSESSMENT RATIOS OF VARIOUS TYPES OF PROPERTY IN
SAMPLE COUNTY OF WASHINGTON, 1921-1928^a

TYPE OF PROPERTY	Number of properties	Average assessment ratio
Farm	85	28
Cut-over and burned forest land	61	54
Merchantable timber land	34	72
Other classes	33	29
Total and average	213	49

^a D. Pinegre and R. C. Hall, *Assessment Ratios of Rural Real Estate in Oregon and Washington*, United States Forest Taxation Inquiry, Progress Report No. 6, Feb. 15, 1930, pp. 15 and 19.

Summary—On the basis of the intensive investigation of assessments in Grays Harbor county, and the more general investigations of the former Department of Taxation and Examination and of the Tax Investigation Commission, it may be concluded that assessments in Washington are very unsatisfactory.

⁵ *Report of the Washington Tax Investigation Commission*, 1930, p. 20.

⁶ Daniel Pinegre and R. C. Hall, *Assessment Ratios of Rural Real Estate in Oregon and Washington*, United States Forest Taxation Inquiry, Progress Report No. 6, Feb. 15, 1930.

Oregon

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, elected by popular vote for a term of four years, and compensated for their work on a full-time salary basis, together with their deputies, annually assess the real property of Oregon. The county judge, assessor and clerk constitute a county board of equalization. This board hears and decides complaints with power to make adjustments on its own motion. Appeals from the decisions of the county boards may be taken to the State Tax Commission. This body makes the state equalization, by counties.

STATE SUPERVISION: POTENTIAL.—The State Tax Commission is composed of three members appointed jointly by the Governor, Secretary of State and State Treasurer (or a majority of them) for terms of four years. Up to 1929, the statutory powers of the Tax Commission with respect to supervision and control were confined to the less drastic types. It had general supervisory power over the local officials; was authorized to issue instructions and directions to them; was empowered to make rules and regulations for their government; and had the customary powers and duties with respect to forms and reports. The power to institute removal proceedings against assessors was not specifically mentioned, but the Commission was authorized to institute proceedings in the courts for prosecution of officials for penalties, liabilities and punishments for violation of the law.⁷ In 1929, these powers were materially extended by new legislation. It was specifically authorized to apply to the courts for the purpose of compelling compliance with its orders.⁸ It was also given the power to order the county boards to make changes in the assessments of individual properties, classes and subdivisions of counties. Most important, it was given the power to order reassessments and to make reassessments with its own appointed representatives.⁹

STATE SUPERVISION: ACTUAL.—Since the new legislation was passed, the State Tax Commission has made vigorous efforts to better assessment conditions in the state. It has organized a department of local assessment, and has a field force of engineers and appraisers. These men have made test appraisals all over the state, and have furnished information on values to the assessors and to the State Tax Commission. In addition, a building valuation manual has been prepared and state conferences held. Finally, an extensive reassessment program has been undertaken, the commission co-operating with the local officials. The greater part of the business buildings of the state have been reassessed, a large part of the residences and a number of farm areas.

⁷ Oregon Code, Annotated, 1930, Title 69, sec. 404.

⁸ Laws of 1929, ch. 465, sec. 8. The county officials are given opportunity to show cause why they should not obey.

⁹ Laws of 1929, ch. 465, secs. 1-3. The present powers of the Tax Commission are set forth in the Code under Title 69, secs. 401-404 and 501-503.

Usually, the reassessments have been made by local men working under the direction of the engineer of the State Tax Commission.¹⁰

RECENT ASSESSMENT CONDITIONS.—Individual Inequality.—Since the recent legislation, and consequent extensive supervisory and reassessment activity of the Oregon State Tax Commission, no study of assessment inequality has been made. However, Prof. W. H. Dreesen has made a very comprehensive study of conditions before these recent changes, and with respect to the rural situation, many of the findings still hold true.¹¹ Some 16,806 transfers of rural property and 23,327 transfers of urban property, or 40,133 transfers in all, constituted this very sizable sample. The data were originally collected by the Oregon Tax Commission during the period of 1921–1926 for equalization purposes. The average coefficients of dispersion, in both the case of urban and rural property, were found to be extremely high; 48.00 per cent, for the urban properties; 50.26 per cent, for the rural properties.¹²

Rural-Urban Inequality.—No very substantial inequality existed as between the average urban and rural ratio as such. As can be seen from Table LXXVIII below, urban property was assessed slightly higher in 1921, 1922 and 1923; rural, slightly higher in 1924 and 1925, and in 1926, the difference was so small as to be negligible. On the average, rural properties were assessed at a very slightly higher ratio than the urban.

TABLE LXXVIII
AVERAGE RURAL AND AVERAGE URBAN ASSESSMENT RATIOS IN
OREGON, 1921–1926^a

YEAR	AVERAGE ASSESSMENT RATIO	
	Rural	Urban
1921.	41.72	43.87
1922.	40.53	41.99
1923.	42.17	44.93
1924.	42.45	40.35
1925.	42.39	39.18
1926.	43.15	43.88
Average...	43.55	41.87

^a Source W. H. Dreesen, *A Study in the Ratios of Assessed Values to Sale Values of Real Property in Oregon*, Oregon Agricultural Experiment Station Bulletin 233, p. 32.

¹⁰ Data from Mr. John H. Carlin, State Tax Commissioner, State Tax Commission of Oregon, under date of July 18, 1934, and *Eleventh Biennial Report of the State Tax Commission, 1929, 1930*.

¹¹ W. H. Dreesen, *A Study in the Ratios of Assessed Value to Sales Values of Real Property in Oregon*, Oregon Agricultural Experiment Station Bulletin 223, June 1928.

¹² Average coefficients of dispersion for the four years: 1921, 1923, 1925, 1926. Dreesen, *op cit.*, footnote p. 41.

Inter-County Inequality.—When the properties were classified by counties, however, wide variations were found to exist. The average county ratio ranged from 27.96 per cent in Clackamas to 72.40 per cent in Wheeler for the rural properties. The inter-county situation with respect to the urban properties was slightly better, although still very bad. For these properties, the county ratios ranged from 25.51 per cent in Clackamas to 65.71 per cent in Gilliam. Table LXXIX shows the distribution of the county average ratios, both rural and urban.

TABLE LXXIX

DISTRIBUTIONS OF AVERAGE ASSESSMENT RATIOS OF OREGON COUNTIES, 1921-1926, RURAL AND URBAN*

ASSESSMENT RATIO	NUMBER OF COUNTIES	
	Rural	Urban
20-29.99	2	1
30-39.99	9	7
40-49.99	16	20
50-59.99	5	6
60-69.99	2	2
70-79.99	2	.
Totals	36	36

* Based on Dreesen, *op. cit.* p. 32.

Regressivity.—A very comprehensive study of regressivity, by the classes into which the data of this study were grouped, was made.¹³ The results were as shown in Tables LXXX and LXXXI.

¹³ It is a basic principle of statistical technique that when it is desired to obtain a representative sample of a mass of data which is composed of diverse elements, that these diversities be classified first and then samples representing each type be selected. Following this basic principle, when it was found that values ranged within different limits in various sections of the state, it was decided to make several classes with different value limits and different intervals. Thus the properties were grouped into three rural classes and two urban classes, the character of the classes being designed to fit the various ranges of property values in the various counties.

TABLE LXXX

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN OREGON,
1921-1926, RURAL PROPERTIES^a

CLASS A ^b		CLASS B ^c		CLASS C ^d	
Value of property	Average assessment ratio	Value of property	Average assessment ratio	Value of property	Average assessment ratio
\$0- \$499	105.56	\$0- \$ 999	71 72	\$0-\$1,499	64.14
500- 999	78 62	1,000- 1,999	54 35	1,500- 2,999	45 82
1,000-1,499	68 59	2,000- 2,999	46 56	3,000- 4,499	39 79
1,500-1,999	59.04	3,000- 3,999	42 43	4,500- 5,999	33 71
2,000-2,499	56.05	4,000- 4,999	40.64	6,000- 7,499	40 50
2,500-2,999	56.24	5,000- 5,999	39.40	7,500- 8,999	41 88
3,000-3,499	52 76	6,000- 6,999	37 84	9,000-10,499	46 57
3,500 and over	38 89	7,000-13,999	38 81	10,500-15,999	39 97
		14,000 and over	41 05	16,000 and over	38 80

^a Dreesen, *op. cit.* p. 17.^b 1,090 sales, 5 counties^c 14,501 sales, 29 counties^d 1,215 sales, 2 counties.

The above table indicates very definite and pronounced regressivity for the rural properties. Properties worth less than \$500 were assessed on the average at 105.56 per cent of their value; those worth \$16,000 or more, at 38.80 per cent. As for the trends within the classes, Class B, containing 14,501 of the 16,806 sales and representing 29 of the 36 counties, showed definite and marked regressivity on the whole, with only slight irregularity.

With respect to the urban properties, pronounced regressivity, even more regular than in the case of the rural properties was revealed, as shown in the table below.

TABLE LXXXI

RELATION OF VALUE OF PROPERTY TO ASSESSMENT RATIO IN OREGON,
1921-1926, URBAN PROPERTIES^a

CLASS A ^b		CLASS B ^c	
Value of property	Average assessment ratio	Value of property	Average assessment ratio
\$0- \$499	76 11	\$0- \$699	72.93
500- 999	61.98	700-1,399	63 75
1,000-1,499	51.11	1,400-2,099	45 21
1,500-1,999	44 35	2,100-2,799	42 67
2,500-2,499	42 15	2,800-3,499	38 36
2,500-2,999	40.52	3,500-4,199	36.53
3,000-3,499	38.49	4,200-4,899	36.21
3,500 and over	38 43	4,900 and over	45 06

^a Source Dreesen, *op. cit.*, p. 28.^b 9,497 properties, 29 counties^c 13,830 properties; 6 counties.

As in the Englund study of Kansas, a comparison of assessment data with census data was made in order to discover whether land or improvements were being the more heavily assessed. Here too, it was indicated that improvements were relatively under-assessed. In 1920, the census reported the ratio of building to total farm value as 13.18 per cent, whereas the assessment rolls showed this figure as only 10.82 per cent. Again, in 1925, the census ratio was 18.01 per cent, the assessment roll ratio, 13.45 per cent. In addition to this census evidence, a negative correlation was found, quite moderate, it is true, — $.3755 \pm .08$, but still indicative, between the assessment ratio and the ratio of building to total farm value. In other words, there was a tendency for the assessment ratio to become smaller as the proportion of the total value represented by improvements increased.¹⁴

Relation of Height of Average Assessment Ratio to Inequality — One of the most interesting parts of this investigation was the attempt to make a definite, objective test of the validity of the common impression that a low average assessment ratio is a cause, or at least a concomitant, of widespread inequality. The method utilized was to test for correlation between the assessment ratio and the coefficient of dispersion. We would expect that the nearer the assessment ratio is to 100 per cent, the less the index of inequality, or a negative correlation between these two factors. This expectation was fulfilled, and the common impression of tax officials and investigators confirmed by Professor Dreesen's findings. For rural properties, the coefficient of correlation was $-.5108 \pm .083$, for urban, $-.4278 \pm .092$.¹⁵

California

ASSESSMENT, REVIEW AND EQUALIZATION.—County assessors, usually elected by popular vote for terms of four years and compensated on a full-time salary basis, annually assess the real property of California. They may appoint deputies to assist them. Cities may elect to have their own assessment organization, and some cities have exercised this right. The county board of supervisors sits as a county board of equalization, in which capacity it hears and decides complaints of taxpayers. It is authorized to raise valuations on its own motion, but may not lower them except on complaint of taxpayers. Appeals from the decisions of the county boards lie to the courts. From 1911 until very recently, no state property tax had been levied, and no state equalization of the ordinary type made.¹⁶ In 1933, however, the people voted

¹⁴ Dreesen, *op. cit.*, pp. 19-21.

¹⁵ *Ibid.*, p. 43.

¹⁶ Revenue Laws of California, p. vii. Article XIII, secs 14 and 15 of the Constitution permitted a state property tax for purposes of making up a deficiency in state revenues, but such had not been levied. During this period, the State Board of Equalization attempted to equalize as between common property and public utility property.

to abandon the policy of Separation of Sources. (Senate Constitutional Amendment No. 30, approved June 27, 1933, operative January 1, 1935.)

STATE SUPERVISION: POTENTIAL—The State Board of Equalization, which is provided for in the Constitution, is the chief administrative tax agency of the state. It is composed of five members, four full-time members (one from each congressional district, elected by popular vote for terms of four years), and the State Comptroller, ex officio. Its statutory powers with respect to state supervision and control are moderately extensive. It has general supervisory powers over the local officials, and is authorized to prescribe rules and regulations to govern supervisors when equalizing and assessors when assessing. It is also directed to prepare and issue instructions to assessors to promote a uniformity adapted to varying local conditions; and to instruct, advise and direct assessors as to their duties in general. It is directed, furthermore, to prescribe and enforce the use of all forms for the assessment of property, and to summon assessors to a meeting at least once a year for discussion. It is authorized to visit the counties for purposes of inspection of the work of the local officials, and to institute proceedings against assessors who have "knowingly, fraudulently, or corruptly" assessed any property below its actual cash value. It does not have the power to order reassessments on its own motion, but may assist local officials to reassess when called upon to do so by the assessing and equalizing officials of the reassessing counties and/or cities. Upon the request of the board of supervisors and the assessor, the member of the State Board from the district within which the county or city is situated acts with the chairman of the board of supervisors and the assessor as a joint reassessment committee.¹⁷

STATE SUPERVISION: ACTUAL—In actual practice, these extensive statutory provisions of the State Board of Equalization are not rigorously applied. Its power to institute prosecution proceedings against assessors who knowingly assess real property at less than actual cash value if enforced would exempt few assessors from trouble. As a matter of fact, the former policy of separation of sources has resulted in delimiting the activities of the State Board of Equalization to rather nominal advisory and educational guidance.¹⁸ It is still an open question whether the abandonment of this policy will result in greater supervision in the future.

RECENT ASSESSMENT CONDITIONS—*The Tax Commission Report of 1929*.—The recent special Tax Commission, of which Professor R. M. Haig was Director of Research, made comprehensive ratio tests of assessments in California, largely in connection with comparing the burden on "common property" and "operative

¹⁷ Political Code of California, 1931, secs. 3669e, 3693, 3698.

¹⁸ Conclusion based on *Final Report of the California Tax Commission*, 1929, pp. 45, 120-131.

property" of public utilities. In one part of the investigation, 4,213 appraisals were utilized as the basis of comparison, the appraisals being obtained from the files of the State Board of Equalization (made by the latter for purposes of equalization as between "common property" and public utility property). A classification of the ratios showed results as presented in Table LXXXII

TABLE LXXXII

DISTRIBUTION OF SAMPLE ASSESSMENT RATIOS IN CALIFORNIA, 1928*

ASSESSMENT RATIO	Number of properties
Under 5	7
5- 9 9	25
10- 14.9	57
15- 19.4	117
20- 24.9	279
25- 29.9	506
30- 34.9	820
35- 39.9	606
40- 44.9	607
45- 49.9	497
50- 54.9	359
55- 59.9	180
60- 64.9	104
65- 69.9	76
70- 74.9	60
75- 79.9	29
80- 84.9	16
85- 89.9	8
90- 94.9	11
95- 99.9	4
100-104.9	9
105-109.9	2
110 and over	34
Total	4,213

* *Final Report of the California Tax Commission, 1929, p. 157.*

The ratios ranged from less than 5 per cent to well over 110 per cent. On the basis of the facts shown in the above table, Martin and Stephenson have computed the coefficient of dispersion. It was 27.58 per cent, indicating very substantial inequality.¹⁹

The Investigation of the Tax Research Bureau.—More recently, the short-lived California Tax Research Bureau (in the office of the State Board of Equalization) undertook a study of agricultural incomes, values and taxes.²⁰ One part of this study was devoted to a study of assessment ratios. The sample consisted of 257 properties spread over eleven counties. Appraisals made by an experienced agricultural expert constituted the basis of comparison.

¹⁹ Martin and Stephenson, *loc. cit.*

²⁰ *Report of the California Tax Research Bureau* (in the office of the State Board of Equalization), 1933, pp. 33-41. This investigatory body was established by Statutes of 1931, ch. 623 and abolished by Statutes of 1933, ch. 954.

The time period was 1929-1931. The results were as shown in Table LXXXIII.

TABLE LXXXIII

AVERAGE ASSESSMENT RATIOS OF VARIOUS COUNTIES AND TYPES OF LAND UTILIZATION IN CALIFORNIA, 1929-1931^a

COUNTY	Types of farm	Number of properties	Average assessment ratio
Fresno	Vineyards	27	55.98
Imperial	Alfalfa, melons, vegetables, grain	20	37.43
Lake	Pears	6	29.95
San Bernardino	Citrus fruits	32	23.82
Santa Clara	Deciduous fruits	28	46.11
Sonoma	Poultry industry	20	26.08
Stanislaus	Dairying	21	47.65
Ventura	Beans, beets	25	37.94
Glenn	All types	23	51.44
Colusa	All types	20	51.11
Tehama	All types	34	44.04
Totals and average		257	40.66

^a Report of the California Tax Research Bureau, 1933, pp. 208-209.

The average ratios were very low, and there was much variation amongst them. The individual ratios were not given; hence it is not possible to compute the index of inequality as amongst individual properties. However, the following summary of the investigation shows that such individual inequalities were very extensive.

"The ratios of assessed to appraised valuations averaged 40.66 per cent, the lowest average group ratio for any county or crop group being 23.82 per cent, and the highest average group ratio being 56.79 per cent. The lowest percentage of assessed to appraised value for any sample was 13 per cent, and the highest, 111 per cent. The lowest extreme range of variation for any county or crop group, comparing the lowest percentage of assessed to appraised valuation with the highest such percentage in the same group, was 187 per cent, and the highest extreme range of variation in any group, similarly determined, was 505 per cent."²¹

²¹ *Ibid.*, p. 36.

CHAPTER XII

SUMMARY OF PART II

In this chapter, an attempt will be made to present (1) a summary of present assessment organization and procedure in the United States; (2) a summary of the evidence on assessment conditions therein; and (3) an interpretation of this evidence, correlating it with the summary of organization and procedure. For purposes of (3), a logical framework of basic theory is employed in analyzing the performance of a governmental function which may be of service in fields other than taxation.

Assessment Organization and Procedure

NEW ENGLAND.—There is a good deal of variation in the assessment organization of the states of New England. However, certain distinctive elements are generally found. These are (a) multi-membered local boards of assessors; (b) slight provision for administrative review and appeal; (c) absence of county equalization; (d) limited statutory powers of state supervision and control.

Assessment.—In Vermont and Connecticut, the local assessing board is generally composed of three members. In Massachusetts and Rhode Island, the number of members varies from three to seven. In Maine and New Hampshire, provision is made for separate boards of assessors although the function is often performed by the town boards of selectmen. In any event, the officials who make assessments in rural New England are elected by popular vote, and are usually compensated on a per diem basis for this work. Cities have their own assessing organizations varying in the method of selection, basis of compensation, and number of assessing officials.

Local Review and Equalization.—No informal administrative review other than by the assessing officials themselves is provided for in Rhode Island. In New Hampshire, the town board of selectmen (which usually makes the initial assessments) has power to make abatements. Connecticut towns have a specific reviewing body, called the board of review. Complaints are to be entertained by the local assessing boards in Vermont, Maine and Massachusetts, but taxpayers have the right of further administrative appeal. In Vermont, such appeals are heard by the board of civil authority, composed of important officers of the locality. In Maine, appeals may be taken to the county commissioners, and in Massachusetts to either the county commissioners or the State Board of Tax Appeals. The county is of slight importance in this section of the country, and no equalization by county officials is made.

State Review and Equalization.—There is no provision for further administrative review in Maine, New Hampshire, Connecticut and Rhode Island, appeals being open only to the courts. (In Maine and New Hampshire, these courts may call upon the state tax officials for a report on the facts of the case although they are not bound to accept it.) In Vermont, appeals may be taken to a local board of appraisers appointed for the purpose by the State Tax Commissioner. Massachusetts is the one state in the group which provides for appeal to a state agency, the Board of Tax Appeals. State equalization in the orthodox sense of the term is made only in Maine and Massachusetts. In the latter state, it is made by the Commissioner of Corporations and Taxation; in the former, by an appointive board composed of the State Tax Assessor and two part-time members. In Connecticut (when imposed) and in Rhode Island, the state tax is levied on the basis of collections rather than assessed valuations, the system known as "apportionment by expenditure" being in operation. In New Hampshire, a policy of reassessment is followed which is considered to be in lieu of equalization. In Vermont, no equalization is made other than the exhortations of the Tax Commission to assess at full value. In the two states where provision is made for state equalization, namely, Maine and Massachusetts, adjustments are confined to town aggregates.

State Tax Administration and Supervision.—The single-headed state tax department is common in New England, Massachusetts, Connecticut, Vermont and Maine having this type of state tax administration. Rhode Island has the tri-membered tax commission generally found in most of the other states of the country. New Hampshire is unusual in several ways. Its Tax Commission is composed of three members, two part-time and one full-time, all of whom are appointed by the Supreme Court. The statutory powers of supervision and control over assessments possessed by the state tax administrative agencies of these states are not very extensive. Ordinarily the legislators have been influenced by the traditional New England sentiment toward local autonomy, and have not liberally conferred the more drastic supervisory powers, such as reassessment and removal. Where such powers have been conferred, they have been granted in limited form. Thus, in Maine and New Hampshire, the reassessment must first be made by local assessing officials; if this reassessment is deemed unsatisfactory, then reassessment may be made by representatives of the state. In Massachusetts, the Tax Commissioner cannot order, but may recommend, a reassessment. In the other three states, the state tax officials do not possess the power of reassessment at all. None of the states of New England specifically grant the power of removal, although New Hampshire, Massachusetts, Maine and Connecticut permit the state officials to institute proceedings in the courts for the enforcement of the law. On the whole, state supervision over local assessment is conceived of as purely advisory and educational

in the statutes of the Commonwealth of New England. Certainly in actual practice such is the case in all of these states except New Hampshire, where the State Tax Commission co-operates in the actual assessing of property. In some of the states, notably Massachusetts and Connecticut, such advisory and educational functions are vigorously administered. In Maine and Vermont, state supervision has been very slight.

THE MIDDLE ATLANTIC STATES—The assessment systems of the three states composing this group have little similarity. Varying proportions of New England, Midwestern and Southern elements are found. From the viewpoint of assessment administration the area may be regarded as a sort of heterogeneous transitional zone.

Assessment.—In all of the states, the town or municipality is the assessment unit and compensation for assessment in rural areas is usually small. Further than this, however, there is little similarity. In New York, there is a board of three assessors in the towns similar to the New England type. In New Jersey, some tax districts have boards, others single assessors. In Pennsylvania, rural areas are assessed by single town assessors. Assessment organization in the cities throughout this section varies widely with respect to the method of selection, compensation and number of assessing officials.

Local Review and Equalization.—No review is made in New York other than by the assessors themselves. There is a county equalization, made by the boards of county supervisors. In New Jersey, county review and equalization are made by county boards appointed by the Governor. These functions are performed in Pennsylvania by the county commissioners.

State Review and Equalization.—New Jersey has a quasi-judicial Board of Tax Appeals for further review of appeals, and the State Tax Department is authorized to make a state equalization, limited to counties. No very energetic attempts toward equalization have been made by the former state boards. In New York, the Tax Commission is not authorized to review complaints of individual taxpayers. However, it reviews complaints of tax districts against the county equalizations, and makes a state equalization (by counties). Neither review nor equalization are made in Pennsylvania (which levies no state property tax).

State Tax Administration and Supervision.—The statutory powers and duties of the state tax officials with respect to supervision over local assessment are moderately extensive in New Jersey and New York, and practically negligible in Pennsylvania. In New York, which has a tri-membered state tax commission, the drastic powers of ordering reassessment and compelling compliance with the orders of the commission are subject to court approval. In New Jersey, where there is a single tax commissioner heading the tax department, the state may order reassessment and institute

removal proceedings. Practically no central control is authorized in Pennsylvania. As for actual practice, state supervision is of a mild advisory sort in New York and New Jersey. In New Jersey, supervision has been divided between the county boards and the tax department, with not a great deal of actual supervision by either body. In New York, the state has aided in the assessment of properties which are difficult to appraise, and has been, in general, moderately active in the matter of supervision over local tax administration. In Pennsylvania, state supervision is practically non-existent.

THE SOUTHERN STATES.—We may consider the South Atlantic, East South Central and West South Central groups together. For despite various dissimilarities, most of the states of these regions possess two distinctive features: (a) the county unit of assessment; (b) slight central supervision and control.

Assessment—In practically all of these states, the county is the assessing unit, with either a single county assessor and his deputies, or with a county supervisory official (as the chief assessing official) and district assessors, generally performing the task. Most commonly there is a single county assessor, elected by popular vote, but a wide variety of types obtains, especially on the seaboard. Thus, in Delaware, tri-membered county boards are appointed by the Levy Court Commissioners. In Maryland, the county commissioners appoint the assessors, ranging in number from ten to fifty-six in the various counties. In North Carolina, a county official (such as the auditor, for example) serves as the supervisor of township assessors appointed by him. In West Virginia, a full-time county assessor usually serves in a supervisory capacity to deputy assessors whom he has appointed. In South Carolina, the assessment is made by township assessors appointed by the Governor upon the recommendation of the members of the General Assembly from their respective counties. In the less densely populated counties of Texas, the sheriff serves as assessor *ex officio*. In Virginia (where there is no mandatory provision for periodic revision of assessments in the less densely populated counties) assessors are appointed by the circuit court in counties, and by the corporation court in cities. In some of the states, such as Delaware, Mississippi, Louisiana, Oklahoma and Arkansas, the assessor is a full-time, salaried official. In others, such as Kentucky, Florida and Texas, he is compensated on a fee or commission basis. In still others, such as North Carolina and South Carolina, he is compensated on a *per diem* basis. Cities are generally permitted to have their own assessing organizations, although in some states, such as Arkansas, Louisiana, Oklahoma, and Tennessee, the county rolls must be used (except where charters or special legislation provide otherwise).

Local Review and Equalization.—Review of complaints and equalization are most commonly performed by the county commis-

sioners acting ex officio. However, there are a number of other types of organization. In Delaware, the county assessing board reviews complaints. In Georgia, the review is made by a county board appointed by the county commissioners; in Arkansas, by a county board appointed by the county quorum court; in Virginia, by the circuit court of counties and corporation court of cities; and in Tennessee by a board appointed by the county quarterly court. In Louisiana, the parish board of equalization is composed of two persons appointed by the police jury and one member by the Tax Commission. In Oklahoma, the county board of equalization is composed of one member appointed by the county commissioners, one by the district judge and one by the Tax Commission.

State Review and Equalization.—With respect to state review, the statutes permit administrative review of the decisions of the local boards in about half the states of this group, namely, Maryland, Kentucky, Tennessee, Oklahoma, Louisiana, and the Carolinas. In Georgia, appeals may be taken to arbitration boards, the composition of which is partly determined by the State Revenue Commission. As for equalization, such is provided for by law in the majority of these states, and in some, namely, Alabama, Kentucky, North Carolina, Tennessee and Louisiana, adjustments may be made as amongst individual properties. In practice, however, state equalization is generally not very important in the southern states. No state equalization is made in Delaware and Virginia (where no state levy on property is made); nor is any equalization provided for in Maryland, Florida and Texas. Statutory provision for an equalization exists in West Virginia, Tennessee, North Carolina and Arkansas, but no state equalization is apparently undertaken in these states. In Georgia, the state equalization is reported to be largely nullified by the possibility of arbitration. In South Carolina, the Tax Commission is seriously hampered by lack of funds for this purpose. On the whole, it may be stated that state equalization in this part of the country is seldom vigorously undertaken, and sometimes not even attempted. In those states where it is undertaken, it is usually made by an appointive tax commission. Examples are Louisiana, Kentucky, Alabama and Mississippi. In Oklahoma, a new appointive tax commission has largely taken over the task, subject to approval of its acts by the ex officio board provided for in the Constitution.

State Tax Administration and Supervision.—The tri-membered tax commission and the single state tax commissioner type of administrative organization are about equally prevalent in this part of the country. In Kentucky, Maryland, South Carolina, Alabama, Mississippi, Louisiana and Oklahoma, there are tri-membered appointive state tax commissions. In Arkansas, the former tax commission has been superseded by a tri-membered appointive corporation commission; in Georgia, there is a tri-membered Revenue Commission, one of the members of which is ex officio, namely, the Comptroller-General. In West Virginia, there is a single tax com-

missioner; in North Carolina, a Commissioner of the Revenue; in Tennessee, a Commissioner of Finance and Taxation; in Virginia and Delaware, a State Tax Commissioner. In Florida and Texas, the Comptroller exercises whatever slight duties are imposed upon him in connection with assessments.

Probably the best summary description of the statutory powers of state supervision and control in these states is made by classifying them into three groups: (a) Practically no state supervision provided for: Delaware, Florida, Virginia, Texas; (b) moderate supervisory powers granted by law: Oklahoma, Tennessee, Georgia, North Carolina, Mississippi; (c) wide powers, including reassessment and removal in most cases: Kentucky, Louisiana, Maryland, Alabama, Arkansas, West Virginia, South Carolina. With respect to actual practice, state supervision is not very vigorous in the southern states, ranging from practically none at all to a moderate degree of state control. Examples of the former are Florida, Texas and Virginia; of the latter, Louisiana, Kentucky and Maryland. There has been a tendency toward greater state supervision in Oklahoma, but the general trend in recent years in these states has been toward diminution of central control, notable examples being Florida, Virginia, North Carolina, South Carolina and Arkansas.

THE NORTH CENTRAL STATES.—The states classified as East North Central and West North Central have enough in common with respect to assessment organization to be considered together. The outstanding characteristics of this group of states are (a) the township or district assessor; (b) the widespread existence of both township and county review and equalization; (c) the comparatively substantial degree of central supervision and control.

Assessment.—In practically all communities where townships exist, there is a township assessor. Thus, the township is the primary assessing unit in Michigan, Indiana, Wisconsin, Minnesota, Iowa, Kansas and Nebraska, and in those parts of Illinois, Missouri, and the Dakotas where township organization obtains. In some of these states, the task is delegated ex officio to a township official, namely, the supervisor in Michigan; the trustee in Kansas; and the township clerk in Missouri. In Ohio, the county auditor is chief assessor, appointing additional deputies to assist him. Most commonly, however, the primary assessing officers in this part of the country are elective township officers, compensated on a per diem basis. Cities generally have their own assessors (with varying methods of selection and compensation), although in some states, the cities utilize the county and/or township rolls (e. g., Ohio—county; Indiana—township; Illinois, some parts county; others, township).

Local Review and Equalization.—Both a township and county review and equalization are made in Michigan, Wisconsin, Minnesota, Iowa, North Dakota and South Dakota. It is in these states that the system of multiple equalization boards reaches its greatest

height, for together with the state equalization, three equalizations are made. With respect to local review and equalization, the members of the boards are, in most cases, local and county officials serving in an ex officio capacity. However, there is a slight tendency in some of the states to regard the task as one requiring financial or engineering specialization to a greater extent than in most states. For example, the county treasurer and county auditor sit with the board of county commissioners in Ohio, in Missouri, the county assessor and surveyor are on the board, and in Indiana, the county assessor, auditor and treasurer sit with the two other members appointed by the county judge.

State Review and Equalization.—The possibility of further administrative appeal beyond the county boards to the state tax officials exists in the case of almost all of these states, Illinois and Nebraska being exceptional in this respect. State equalization is made in all of the states of this group. Usually it is made by an appointive state tax commission, although there are various exceptions. Thus in Michigan, the Auditor-General and Commissioner of Agriculture are on the board. In South Dakota, the equalization is made by the Director of Taxation, the Assistant Director, and the Auditor. In Nebraska, the Tax Commissioner is a member of the ex officio board and does most of the preliminary work. In Missouri, the State Tax Commission prepares the equalization, although it must be passed upon finally by an ex officio board. With respect to the scope of state equalization, it extends to individual properties by law in Iowa, Kansas, Minnesota, Missouri and South Dakota. As stated above, individual changes may be made in most of the other states upon appeal of taxpayers.

State Tax Administration and Supervision.—The composition of the state administrative tax agency in this section of the country is generally the tri-membered full-time appointive Tax Commission. In Nebraska, North Dakota and South Dakota, however, there is a department headed by a single tax commissioner. The statutory powers and duties with respect to state supervision over local assessment are generally extensive. The state tax officials of the majority of these states have wide powers and duties with respect to general supervision, advice, visits, and conferences, and usually possess the powers of reassessment and removal. However there are often limitations in the case of the more drastic powers. Thus, the reassessment power is limited to ordering the local officials to reassess in the case of Illinois, Ohio, Iowa and South Dakota. In Missouri, only individual properties may be reassessed by the Tax Commission. In Wisconsin, the Tax Commission may reassess only on petition of the owners of 5 per cent of the property of a district. In the other six states, this power has been liberally conferred. With respect to the removal power, the commissions of Illinois and Ohio may institute proceedings in the courts for the enforcement of the law, the specific power of removal not being mentioned. In Iowa, Nebraska, North Dakota,

South Dakota and Wisconsin, the state tax officials may institute removal proceedings in the courts. In Michigan and Minnesota, charges are to be preferred to the Governor. The widest powers have been granted in the statutes of Kansas and Indiana. In Kansas, the Tax Commission may remove county assessors (supervising officials) on its own motion, and local assessors on complaint of the county assessor. In Indiana, the state tax officials possess the power of direct administrative removal, the only qualification to full authority being the right of appeal of the local official to the judge of the circuit court.

In addition to these wide powers, an intermediary supervising official is provided for in a number of these states, namely Indiana, Kansas, Nebraska and Wisconsin. In Indiana, he is a full-time county official. In Kansas, he is a full-time county official, except in counties of less than 65,000 inhabitants, in which the county clerk performs the duties of the office. In Nebraska, he is a full-time county official in fifty-six counties, while in the other thirty-seven, the county clerk performs this function. The highest development has occurred in Wisconsin, where the intermediary supervisor is a technically qualified, civil-service appointee of the State Tax Commission.

The average degree of actual state supervision and control over assessments is relatively fairly high in this part of the country. As for variations from this average, at one end are Wisconsin, Minnesota and Indiana; at the other, North Dakota, South Dakota and Nebraska. Greater central control has been established in Iowa in recent years, and the state tax officials of some of the states such as Wisconsin and Minnesota have maintained their vigorous policies. On the other hand, state supervision has markedly diminished in Michigan and North Dakota, and is less energetic than it was at one time in Kansas, Ohio and Missouri.

THE FAR WESTERN STATES.—We may combine the Mountain states and the Pacific Coast States into one classification with respect to assessments, calling them the Far Western States. The distinctive features of this group of states are (a) a high degree of uniformness with respect to local administrative organization; (b) the county unit of assessment; (c) extensive subclassification of real property, with state equalization by such subclasses of considerable importance (the state property levy is a very important tax in this part of the country); (d) moderately vigorous state supervision, with the general trend toward increasing central control.

Assessment.—The uniformity with respect to the organization of local administration is greater for these states than in any of the other groups. A county assessor is elected in all of the states, and in all but Nevada and California it is provided by law that he be a full-time salaried official. Cities are required to use the county rolls (except where charters or special legislation provide otherwise).

Local Review and Equalization.—A high degree of uniformity also obtains with respect to the organization for local review and equalization. In most of the states, these tasks are performed by the county commissioners. California and Arizona have the supervisor type of county administration and hence the county board of supervisors, and Oregon is exceptional with a county board of equalization composed of the county judge, assessor, and clerk.

State Review and Equalization.—Further administrative appeal is possible in the majority of the states, namely Montana, Colorado, New Mexico, Arizona, Nevada, Wyoming, Utah, Washington and Oregon. In Idaho and California, appeals must be taken to the courts. Almost all of the states make a state equalization, California (with no state levy) and New Mexico being exceptional in this respect. This equalization has been of considerable importance in most of these states. Real property is subclassified in practically all of the Mountain states, and the equalization is made by classes and counties. Usually the state equalization is made by appointive, technical officials. In Colorado, there is an ex officio board provided for in the Constitution which may modify the recommendations of the appointive Tax Commission. In Idaho, the state equalization is made by an ex officio constitutional board.

State Tax Administration and Supervision.—In contrast with the homogeneity of types of local assessment organization, there is a good deal of variety in state tax administrative organization in this region. In Wyoming and Montana, there are state boards of equalization which are equivalent to state tax commissions in all respects save in name. In California, four of the five members of the State Board of Equalization are elective, the fifth being the Auditor, ex officio. Arizona, Colorado, New Mexico, Nevada, Oregon, Utah and Washington all have tax commissions, but they vary in the number, method of selection and tenure of their members. In Arizona, there are three full-time elective members; in Colorado, Washington and Oregon, three full-time appointive members. In New Mexico, there are three appointive members, of which only the president is full-time; in Utah, four appointive members, two full-time and two part-time. Nevada has a very unusual tax commission, composed of seven part-time officials, some appointed specifically for the post, others serving in an ex officio capacity.

The statutory powers of state supervision and control possessed by these various boards and commissions are quite broad. Wide powers and duties with respect to general supervision, advice, conferences, and visits are granted in most of the statutes, and most of the state administrative bodies of these states are either able to reassess or to make extensive changes in connection with equalization. Thus the power of reassessment is possessed by the state officials of Colorado, New Mexico, Oregon, Utah, Idaho (limited to ordering the local officials to reassess), and

probably Washington. In Montana, Arizona, Nevada and Wyoming, the power of equalization includes adjustments as amongst individual properties, classes and localities and hence could be used to bring about the same results. In California, the State Board of Equalization may assist in reassessments upon request of the localities. With respect to removal, the power to institute removal proceedings is possessed by the state tax officials of Arizona, Colorado, Idaho, Montana, Nevada, Utah, Wyoming, and probably Washington. In California, power is granted to institute prosecution of assessors fraudulently assessing property, and in New Mexico and Oregon, the Tax Commission may institute proceedings for the enforcement of the law.

State supervision and control in the Far West appears to be developing very rapidly in recent years. Many of the states take an active part in the classification of property, and in recent years there has been an outcropping of reassessment activities, constituting violent reactions against the results of local administration. In some states, such efforts have met with ill-fortune; in others, with success. In New Mexico, the state tax officials attempted a vigorous policy of cooperative reassessment some years ago but the program came to grief with the realization on the part of such counties that they would be assessed at higher ratios than other counties for state tax purposes. In Arizona a state-wide reassessment program commenced in 1929 met with judicial reverses. In Utah and Oregon, however, vigorous policies of co-operative state reassessment inaugurated in 1929 and 1930 respectively have met with conspicuous success.

Assessments Under Present Administrative Organization

The evidence on recent assessment conditions which have been surveyed in this report may be grouped about five main heads: (a) Complete escape of property from the tax rolls; (b) rigidity, *i. e.*, the failure of assessments to "adjust" to changes in actual values; (c) inequality as amongst average assessment ratios of various kinds: rural-urban; inter-district; inter-class; land-improvement; resident and non-resident owned; (d) regressivity; (e) inequality as amongst individual properties.

COMPLETE ESCAPE OF PROPERTY.—Evidence that some real property is escaping entirely from the tax rolls has been revealed in only a few states, although it is logical to infer that this condition is not uncommon in the vast majority of states. In Connecticut, tax maps recently made by aerial photography have revealed a surprisingly large number of properties enjoying complete exemption at the expense of the rest of the taxpayers. In Arizona, it was discovered during the course of the reassessment survey that many taxable buildings were omitted from the rolls. In South Carolina, a comparison of land acreage as reported by the census and land acreage listed for taxation disclosed much farm land escaping taxation. It is very probable that similar evils exist in most of the other states.

RIGIDITY.—There is a good deal of evidence that rural assessments are not altered so as to conform to changes in values, but instead are copied each year from the previous year's roll, or are changed by flat percentage increases or decreases applied uniformly to all properties (regardless of individual and group differentials in actual value changes). These evils were found in almost all of the field investigations: the field investigation of the New York Special Joint Legislative Committee of 1923; the field investigation of the New York State Commission for the Revision of the Tax Laws of 1932; the Newton-Hedrick investigation in Michigan, the survey of the Institute for Government Research in Mississippi; the investigation made by Griffenhagen and Associates in Wyoming; the field survey of the North Carolina Tax Commission of 1928. The existence of this evil has also been lamented in Colorado, by Prof. J. P. Jensen, and in Nevada, by Mr. P. Y. Gillson, a former member of the Tax Commission. In Missouri, Dr. C. H. Hammar found that changes were made irregularly and sporadically, being dependent upon such factors as changes in assessing officers or violent economic upheavals. In no state was it found that assessments were continuously and smoothly adjusted to economic conditions when and where they occurred.

INEQUALITY AS AMONGST GROUP AVERAGES.—*Rural-Urban*—Inequality as amongst rural and urban properties was found in almost all the investigations. Table LXXXIV shows the facts for those states where average assessment ratios of a comparable nature were computed for both types.

The differences in the average rural and urban ratios were slight in some states, *e. g.*, Minnesota, Colorado, Texas and Oregon. In other states, such as Maryland (1927–1932), Illinois, North Carolina, New York and Wisconsin, they were very great.

The time of comparison is an important factor, as the detailed figures for separate years of Delaware, Maryland and Oregon clearly show. There is a popular tendency to regard an average assessment ratio as a rather permanent, fixed figure. This point of view is fallacious, particularly in times of rapidly changing market values. As has been just described, assessed valuations commonly lag behind actual values. Hence changes in market values will result in substantially altered assessment ratios. This is probably the explanation for the fact that rural properties, which were declining in value in most of the states at the time that the ratio tests were made, were more often found to be assessed at higher average ratios. At any rate, the rural ratio was higher in Pennsylvania, Delaware, Maryland (except 1918–1921), Virginia, West Virginia, North Carolina, Florida, Illinois, Wisconsin, Minnesota, Missouri and Nebraska. It was lower in New York, Iowa, Kansas, Arkansas, Louisiana, Texas, Colorado and California. In Oregon it was higher in 1924 and 1925; lower in 1921–1923 and 1926.

TABLE LXXXIV
RURAL-URBAN INEQUALITY

REGION AND STATE	Year or years	Rural	Urban
Middle Atlantic			
New York	1915-1925	49 1	63 6
Pennsylvania	1923-1925	49 8	40 3
South Atlantic			
Delaware	1921	82 2	80 4
	1924	89 7	73 4
	1926	89 0	75 3
	1927	88 8	79 2
Maryland	1918-1921	50 6	57 3
	1923-1926	70 9	58.6
	1927-1932	61 5	66.8
Virginia	1926	45 5	38 4
West Virginia	1929	69 6	64 4
North Carolina	1928	75 0	58 6
Florida	1923-1924	21 8	19.4
East North Central			
Illinois	1927	41.9	29 7
Wisconsin	1927	92.4	72 5
West North Central			
Minnesota	1926-1927	84.6	83 2
Iowa	1927	48 0	52.2
Missouri	1929	58	52
Nebraska	1928	58.7	47 9
Kansas	1913-1922	65 6	73 3
West South Central			
Arkansas	1921-1925	35 0	56.0
Louisiana	1925-1930	51 0	61.4
Texas	1932	38	39
Mountain			
Colorado	1925-1926	61 0	63 6
Pacific			
	1921	41 7	45 9
	1922	40 5	45 0
Oregon	1923	42 2	45 0
	1924	42 5	40 4
	1925	42 4	39 2
	1926	43 2	43 9
	1928	38 7	43 0
California	1931	40 57	44 77
	1932	42 27	45 16

Variations as Amongst Average Assessment Ratios of Local Government Units—In order to make possible comparison of the extent of this type of inequality, the method of computing an index of the average degree of variation, which has been applied in the preceding chapters to *individual* inequality, has been extended to *average* assessment ratios of local governmental units. In Table LXXXV are presented indices showing the average degree of disuniformity as amongst average assessment ratios of counties, cities and other local units within a number of states of the country.

TABLE LXXXV

INEQUALITY AS AMONGST AVERAGE ASSESSMENT RATIOS OF LOCAL GOVERNMENTAL UNITS

REGION AND STATE	RURAL		URBAN		ALL	
	Type and number of localities	Inter-locality coefficient	Type and number of localities	Inter-locality coefficient	Type and number of localities	Inter-locality coefficient
New England						
Massachusetts.....	8 towns...	12	.....	.....	.....	.....
Middle Atlantic						
New Jersey.....	16 counties.	16	.....	.....	.....	.....
South Atlantic						
Maryland.....	6 counties.	9	6 counties	7	.....	.....
West Virginia.....	.....	.....	.....	.....	55 counties.	18
North Carolina.....	11 counties.	15	.....	.....	.....	.....
Florida.....	10 counties	51	10 counties.	43	.....	.....
East South Central						
Mississippi.....	.....	.....	.....	.....	82 counties	15
Tennessee.....	.....	.....	.....	.....	11 counties.	9
West South Central						
Louisiana.....	11 counties.	11	11 counties.	10	.....	.....
Texas.....	8 counties.	29	7 counties.	12	.....	.....
East North Central						
Illinois.....	.....	.....	.....	.....	10 counties	14
Indiana.....	.....	.....	7 counties.	7	.....	.....
Wisconsin.....	12 counties.	12	3 cities....	12	.....	.....
West North Central						
Minnesota.....	6 counties	7	6 cities....	7	.....	.....
Iowa.....	41 counties.	8	8 cities....	8	.....	.....
Kansas.....	105 counties.	9	105 counties.	13	.....	.....
Missouri.....	39 counties.	16	39 counties.	13	.....	.....
North Dakota.....	3 counties	11	.....	.....	.....	.....
Nebraska.....	12 counties	16	7 cities....	15	.....	.....
Pacific						
Oregon.....	36 counties	16	36 counties	12	.....	.....
Washington.....	39 counties.	21	39 counties	17	.....	.....

Variations in the average assessment ratio of counties and cities were of comparatively slight extent in some of the states *e. g.*, Minnesota, Iowa and Maryland. On the other hand, inequality of this type was glaring in Florida, and very substantial in Texas, Washington, West Virginia, Mississippi, New Jersey, Missouri and Nebraska. Such inter-district inequalities do not affect the fairness of the local levies, but they do affect the fairness of the state levy, and in the case of cities and towns, the county levy.

Other Types of Inter-Group Inequality.—Summary—Various other types of inter-group inequality were revealed. In the Englund study of Kansas, the Dreesen study of Oregon, and the Blakey study of Minnesota, evidence was submitted that land was being overassessed relatively to improvements. In the Blakey study, non-resident owned properties were found to be relatively overtaxed. In the investigations made in Wisconsin and Washington by the United States Forest Taxation Inquiry, certain classes of property were found to be faring better than other classes. In an investigation of assessment conditions in Chicago, Prof. Simp-

son found extremely wide variations as amongst the average assessment ratios of the various classes of real property in that metropolis. Substantial variations of this type were found by the present writer in New York City.

The relative significance of these forms of inter-group inequality varies. Inter-county inequality is of slight importance in those states where the state levy on property is either non-existent, rarely levied, and/or light, in states where the property tax is the mainstay of state revenue, it is of considerable consequence. Inequality as amongst cities and towns affects the county levy as well as that of the state. Inequality as amongst physical classes of property not only affects the state and county levies but also the local levies. However, the most important form of inter-group inequality is that amongst value classes. This has been discussed under the heading of regressivity in the survey of the individual states, and will be discussed thereunder in this summary chapter.

REGRESSIVITY.—There is a great deal of evidence that the real property tax, as administered at present, is a regressive tax. In a few of the investigations, it is true, the tendency on the part of assessors to assess the less valuable properties at higher ratios was found to exist only up to a certain point, *e. g.*, \$15,000 in Maine and \$16,000 in North Carolina. In a few of the tests, moreover, regressivity was found to be only slight, *e. g.*, Indiana (only mild regressivity found in four of the seven counties) and Iowa (only slight urban regressivity). But the vast majority of the tests coincided in their finding that there was a definite and pronounced tendency for the average assessment ratio to decline as the value of the property (or value per acre, when this was used as the basis of classification) increased.

INEQUALITY AS AMONGST INDIVIDUAL PROPERTIES.—CONCLUSIONS.—Of all the various types of assessment inequality, inequality as amongst individual properties is the most important. It is the local levy which is of chief fiscal significance; it is the inequality of these levies which constitutes the heart of the problem of assessment inequality. Inequality as amongst physical classes and as amongst value classes indicates the direction which individual inequality takes; rural-urban and inter-district inequality add to the inequality of the state and county levies; but it is the variations in the treatment of individual properties by the assessors which is the very essence of the problem of assessment inequality, and it is the coefficient of dispersion, measuring the average degree of such inequality which furnishes the best index of assessment efficiency. These coefficients are presented in Table LXXXVI.

TABLE LXXXVI
INEQUALITY AS AMONGST INDIVIDUAL PROPERTIES

REGION AND STATE	RURAL	URBAN	ALL
	Coefficient of dispersion	Coefficient of dispersion	Coefficient of dispersion
New England			
Massachusetts	23.76		
Connecticut	29.40		
Maine	34.13		
Middle Atlantic			
New York		21.7 (N. Y. C. only)	
Pennsylvania	35.53	32.2	
New Jersey		43.9 (Land)	
		30.4 (Buildings)	
South Atlantic			
North Carolina	29.2		
Delaware	32.2	31.1	
Maryland	34.9	37.7	
Virginia	44.43		44.26
West Virginia	59.4	52.33	
Florida	69.60	68.92	
East South Central			
Mississippi	40.77		
Tennessee	39.2		35
West South Central			
Arkansas	41.80		
Texas	48	49	
East North Central			
Wisconsin	16.35 (Southern and Central)	25.12 (Cities)	
Ohio	23.0 (Northern)		
Indiana	24.83	31.95	
Illinois		36.5 (Chicago, before reassessment)	51.60
		20.0 (Chicago, after reassessment)	
West North Central			
Iowa	19.16	32.06 (Cities)	
Kansas	22.5	32.73 (Towns)	
Minnesota	21.0 (Southern)	19.7	
	27.9 (Central)	25.97	
	33.2 (Northern)		
Nebraska	26.65	27.30	
North Dakota	32.00		
Missouri	34.13	34.67	
Mountain			
Colorado	30.06		
Pacific			
California			27.58
Oregon	50.26	48.00	

With respect to the rural situation, the general average for the country is poor. Better than average assessments are found in some of the Midwestern states, with the least unsatisfactory situation existing in certain sections of Wisconsin. The most unsatisfactory conditions are found in the South Atlantic, South Central, Mountain, and parts of the Pacific Coast regions, with the most glaring inequality existing in Florida.

Most of these conclusions are based upon the results of the ratio studies. The conclusion with reference to the Far West is

based upon a variety of evidence, including field investigations, statements by official or quasi-official authorities and a few ratio studies. The latter, in some cases, have not been published in sufficient detail to make possible computation of the coefficient of dispersion, but the very wide ranges are indicative of very inequitable conditions.

The evidence on urban assessment is not quite so abundant as in the case of rural assessments. However, such data as are available indicate that the average is again poor. The ratio tests, field investigations and other evidence indicate that the assessments of the South Atlantic, South Central, and Mountain states are least equitable. Progress has been made recently in some of the states of the Pacific Coast, *e. g.*, Oregon. Urban assessments in New York and Connecticut have improved in recent years. It may also be mentioned that assessment techniques have been established and developed to the greatest extent in the larger cities of the country. (The development and present status of such techniques is discussed at length in the next section of the report.)¹

This description of assessment conditions summarizes the facts found in the course of this survey. To enable us to grasp the significance of these facts, a logical analysis of the basic factors and forces which are involved must be made.

Analysis and Interpretation

FUNDAMENTAL THEORY:—"A FRAME OF REFERENCE."—The two basic factors involved in the testing of the efficacy of the administration of any governmental function are the difficulty of the task set before the governmental agency charged with its performance, and the competency of the administrative officers (including their equipment and facilities as well as their personal abilities) to cope with the task. These two factors are fundamental to an understanding of problems in the field of public administration, and are somewhat akin to demand and supply, and stimulus and response, to an understanding of economic and psychological matters. Around these two factors, all of the other forces may be grouped. For example, one might take almost any function of government performed by local officers and group the principal conditioning forces about them as follows: (1) the difficulty of the task conditioned by (a) qualitative factors; (b) quantitative factors; (2) the ability of the administrative organization, conditioned by (a) the general tone of the entire local government; (b) the character and extent of state supervision and control.

The Difficulty of the Task: Qualitative Factors.—With respect to the function of assessment, qualitative factors include circumstances which make the task of assessment either relatively simple or relatively complex. A good example of this factor is heterogeneity of land types and topography. In areas where land is homogeneous,

¹ Part III, *infra*, p. 255 *et. seq.*

values per acre are apt to be more similar and the task of assessment substantially less difficult, than in areas where lands vary widely in character.

Quantitative Factors—Quantitative factors refer to the size of the task, geographically or numerically. Thus, the size of the task is greater in a county than in a town; in a large city than in a village. The qualitative factors may either offset or add to the effect of the quantitative factors. For example, in a large city, where both multiplicity and complexity of property types obtain, both factors tend to make the task more difficult. On the other hand, a county wherein land types are very similar may be easier to assess than a town with a wide variety of industries and land uses.

COMPETENCY OF ADMINISTRATION: General Tone of Local Government.—The general tone of the entire local government administration is an important matter. Assessment is one function in a complex of functions performed by a set of officials who have much in common. There is an average quality of administrative efficiency for this whole conglomeration of functions, with some functions administered better and others worse than this average. In a city dominated by a powerful political machine, is it not to be expected that corruption will manifest itself in all of the functions? In rural areas which have made little technological advance in general administrative efficiency, is it not to be expected that assessment administration will be non-specialized and inexperienced?

Character and Extent of State Supervision.—With respect to the character and extent of state supervision and control, this factor may have a substantial effect on local assessing by either (a) accelerating the rate of installation of modern systems or (b) stimulating assessors to try more conscientiously with existing facilities and using present methods.

General Observations.—All of these factors exert their influence on the final result. One factor may be the crucial or deciding consideration in one state; a different factor in another state. For example, the relatively good showing of Wisconsin rural areas is undoubtedly due to its vigorous policy of state supervision; that of Iowa most probably to the fact that the task of assessment in the rural areas is simpler than in many other states because of the homogeneity of land types existing therein.

APPLICATION OF THE "FRAME OF REFERENCE." Rural Assessment Inefficiency.—Applying this general analysis more comprehensively, it is immediately evident that the essential reason for the poor results of rural assessing is the wide disparity between the difficulty of the task of assessment and the nature of the assessing administration. The placing of a capital value upon rural real property, even of an ordinary farm (which in fact is an intricacy of value elements of both home and economic enterprise) is really a very

complicated and technical affair. It requires an exact knowledge of the physical characteristics of the properties; an understanding of economic factors of value; sound judgment; and strict honesty. But all available data show very conclusively that, with slight exceptions, the assessing officials in rural communities have at the present time, few, at best, of these qualifications. Often they are impartial and try to assess all properties uniformly, but very rarely do they possess the technical equipment and ability to make this attempt at fairness more than a case of "good intentions." The field investigations which have been surveyed in this report have dwelt at length on the absence of such necessities as tax maps, reliable physical inventories of properties, and the economic analytical ability so necessary to good assessing. Many of the investigations have summarized the whole procedure as one of copying former rolls and making horizontal changes at sporadic intervals. Sometimes individual changes are made on the basis of general, rough familiarity with properties and values when a new assessor takes office. In the vast majority of rural communities, this is the most that is done.

Explanation of Regressivity.—The discrepancy between the difficulty of the task and administrative competency is widest in the assessment of the most valuable properties. It is here that the prevalent method of assessing rural real property on the basis of general familiarity breaks down worst. For the range of knowledge of values possessed by the average rural assessor does not include familiarity with the more valuable properties. Usually a small farmer himself, he cannot think in large enough terms to appraise valuable properties. Again, he may be unduly influenced by the importance of a large taxpayer in the community. In either event, or in both events, the assessment of such properties makes the largest demands on administrative competency, and presents a task which the average assessor has utterly failed to meet. Because of his failure, the vast majority of taxpayers, who are owners of the smaller properties, are unjustifiably penalized.

Inter-Reactions of Difficulty of Task and Administrative Competency.—As in the case of demand and supply or stimulus and response, the one factor directly affects the other. For example, in rural assessing, heterogeneity of land types makes the task of assessment more difficult. One might immediately jump to the conclusion that therefore assessments should be less inequitable in those areas where lands are similar and homogeneous. Hammar in his study of assessments in Missouri found, however, that there was a definite tendency for areas of the latter type to be assessed worse than areas of the former type. The explanation lay in the fact that the greater difficulty of the task in the case of the heterogeneous land type districts served as an incentive to more careful assessing, whereas the greater easiness of the task in the homogeneous land type districts led to the absence of exertion on the part of assessors. The result was that the difference between

the difficulty of the task and competency of administration was actually greater in the case of the districts which were easier to assess. This was the particular reaction of the one factor upon the other found in rural areas of Missouri. However, this stimulus does not necessarily produce this response. The more difficult to assess areas may be assessed with greater inequality, substantially the same degree of inequality, or as in Missouri, with less inequality.

Rural and Urban Assessment Efficiency.—The frame of reference outlined above, particularly the last-discussed aspect,—inter-reactions of the fundamental factors of difficulty of task and competency of administration,—furnishes the key to the wide disparity in the present status of assessing methods and techniques in urban as compared with rural areas.² The system of local familiarity has worked inequitably in rural areas, but it resulted in intolerable assessments in the larger cities. For here, with the multiplicity and complexity of real estate types, the necessity for organization and system has been most pressing. Hence the response, the development of technical urban assessing methods.

It should be emphasized that the mere existence of such technical methods furnishes no guarantee that assessments are being made with more equity. The evidence in Table LXXX gives no indication that urban assessments are better than rural. In Delaware, Florida, Missouri, Texas, Virginia and Oregon, the difference between the urban and rural coefficient was so small as to be of negligible importance. In Pennsylvania, the urban assessments were slightly better; in West Virginia, the urban coefficient was smaller, but so high that it still indicated a case of extreme and glaring inequality. On the other hand, the rural coefficient was slightly lower in Maryland and in parts of Minnesota, and substantially lower in Iowa and Wisconsin. These facts seem to be somewhat contrary to popular belief that urban assessments are better than rural. A partial explanation lies in the fact that the urban coefficients computed in the studies were to a large extent based upon properties in the smaller cities, where the advanced techniques and methods have made the least headway. However, it is also true that the task of assessing is considerably more difficult in cities, and in some cities this consideration of difficulty has proven to be of more weight than the efforts made to cope with it. Moreover, political partisanship often rises to great heights in large urban centers, and this may result in a high degree of inequality even where technical systems are in existence.

To repeat, the mere existence of technical methods in the urban field does not mean that therefore urban assessments are better than rural. Where cities have failed to install technical systems, the results are undoubtedly worse than in rural localities, for the method of local familiarity does not break down quite so badly in rural communities. Where cities have installed such systems, the

² For data on the present status of assessing techniques, see Part III, *infra*, pp. —.

results may not be much better than in rural localities if the degree of efficiency only counterbalances the greater difficulty of the task. On the other hand, the net result may be, and no doubt is, especially in some of the larger cities, greater equality in urban assessments, the degree of efficiency attained more than equaling the greater difficulty of the task.

County Unit and Town (or Township) Unit Assessment Efficiency.—Conclusion.—A widely held belief which deserves more realistic consideration than it has thus far received is the conviction that the county unit of assessment has proven better than the town or township unit. This belief has no basis in fact. According to the best available information, part of which is presented in Table LXXXII, assessments are worst in the county unit states, the South, the Southwest and the Far West. Why this should be so is readily explained with the frame of reference described above clearly in mind. The task of assessment is quantitatively greater in county unit states, and hence really more difficult. If the normal reaction had been the establishment of a competent organization to deal with it in the more difficult county form, the result might have been better assessments than in the town or township type. But the reaction has been quite the reverse. Two types of adjustment have most frequently occurred: (1) The employment of part-time deputies; (2) the degeneration of the entire system into self-assessment. The poor showing of the county unit states is not entirely caused by this one factor of larger area. State stimulation and supervision have been non-existent or slight in most of the Southern states, for example, and the general governmental efficiency may be greater in the Northeast and Middle West; but on the whole the county unit in practice has usually been a detriment rather than an aid to good assessment in the past. There are exceptions, and with technical administration the county might prove a better unit than the town or township. So far as the record goes, however, the county unit has made the poorer showing.

Further analysis of the county unit of assessment will be made in the next section of the report, which is an analytical survey of proposals for the rectification of present assessment evils. That these evils are extensive, that the real property tax is inequitably and regressively administered, are the conclusions which the survey of recent assessment conditions in the present section has incontrovertibly established.

PART III

ANALYSIS OF PROPOSALS FOR REFORM

CHAPTER XIII

EQUALIZATION

Recent Tendencies and Practices

As has been shown in Part I of this report, state equalization of the post-assessment type was at first generally made by legislative committees or boards composed of sectional representatives, later by ex officio state boards of equalization, and most recently by state tax commissions or departments. This trend toward specialized administrative personnel was accompanied by a development of specialized technical methods. In a number of states, the basis of equalization changed from political considerations to objective value data, and in these states the function came to be a technical statistical task. This type of equalization spurted forward in the period from 1917 to 1926, as a result of the federal stamp tax on real estate transfers which was then in force. For by a simple calculation, based on the amount of revenue stamps affixed to transfer deeds plus mortgages, it was possible to acquire large quantities of value data conveniently, and at little expense. After the repeal of the law, in 1926, the further introduction of such objective equalization declined, and in those states where it had been established, its quality deteriorated. It was very difficult to obtain reliable sales data in large quantities, since in most transfers the actual consideration is not stated. The tax was reimposed by the Revenue Act of 1932 and is now in force, but the influence of the deterioration of state equalization after 1926, coupled with both the unrepresentative nature of many sales records during the depression and the continuation of the decline in importance of the state levy on property, have combined to make state equalization considerably less effective than it was years ago. There are a number of states to which these observations do not apply, most notably, Wisconsin. This state has continued even to improve and refine, and has adjusted its methods to changing economic circumstances. Because its present practices constitute the highest development of state equalization in the United States, a description of the Wisconsin system is presented below.¹

The Wisconsin System of Equalization

THE SYSTEM PRIOR TO 1925.—Prior to 1925, the Wisconsin system of equalization was a variant of the sales ratio method

¹ The description of state equalization given herein is based largely on J. Roy Blough, "Recent Developments in Methods of Real Estate Equalization in Wisconsin," *Journal of Land and Public Utility Economics*, May 1934, p. 137 et seq. The methods are described in extensive detail in the *Manual for Supervisors of Assessments, Field Statistician and Property Tax Employees of Central Office*, published by the Wisconsin Tax Commission in 1931.

common in a number of states. The assessors of income or supervisors of assessments collected sales data which they sent to the Tax Commission. The accepted sales in each taxation district were assembled, and the total sales values and total assessed valuations of these properties aggregated. The total assessment of all the real estate in the district was then divided by this ratio, thus approximating the actual true value of the real property of the district. The most unique feature of the Wisconsin equalization prior to 1925 was the five-year moving average, true values of the four preceding years, being averaged with the current year.

FACTORS MAKING FOR CHANGE.—Objection that the sales method was too mechanical an operation had been made almost from its establishment (around 1903) in Wisconsin.² However, the method continued to be used until value trends developing after the world war caused a number of serious shortcomings to disclose themselves in bold relief. Commencing with 1921, a trend of decline in rural values set in, while urban land values, after a break, began an upward climb. The decline in rural values was accompanied by a marked decrease in the number of transfers of rural estate, and such sales as did transpire were, for the most part, forced liquidation sales of one kind or another. Moreover, diversification of rural property was increasing with the growth of summer resorts and suburban real estate developments, and transfers of such property came to dominate the sales ratios. These ratios were obviously not representative of the mass of farm lands. Nor were the increasingly greater numbers of sales of vacant lots and small residences caused by extensive real estate subdivision activities resulting in representative urban ratios. In addition, the employment of the five-year moving average caused a pronounced lag of equalized values behind real values of rural lands, making the tax load on Wisconsin farms, already hard enough to bear because of the decline of values and earnings, still more burdensome. Because of these conditions and circumstances, the necessity for modifications in the system became acute, and important changes were finally adopted in 1925.³ Since that year, the five-year moving average has been abolished and the whole system has been improved and refined in various ways.

MODIFICATIONS MADE IN 1925.—1. *Abolition of the Five-Year Moving Average.*—In place of the five-year moving average, the commission has adopted a system whereby current values are the starting points or base values for the subsequent year. The method is described in the *Manual for Supervisors of Assessments* published by the Tax Commission in 1931 as follows:

“A base value for the real estate of a taxation district must not be changed without evidence to substantiate the change. A value good enough to be recommended to the county board one year must not be lightly cast aside the next year.

² For further detail, see Blough, *op. cit.*, pp. 140-141.

³ *Ibid.* pp. 141-143.

"Such base value, on the other hand, must not be allowed to remain as it is without evidence.

"These two requirements are not paradoxical although they may seem to be. The base figure was used the year before as the recommended taxation-district value. The presumption that it is correct can be overturned only by evidence showing that the value has changed. On the other hand, the value of a taxation district may have changed considerably over the year. It requires work and evidence to show that no change has taken place in such value before the supervisor is privileged to allow it to remain at the same figure for another year."⁴

2. Refinement by Extensive Sub-Classification.—Secondly, the former crude rural-urban, land-improvement classification has been superseded by a far more detailed subclassification of real property. By detailed subclassification, it is possible to make an equalization which is more appropriate to the actual value trends of component subaverages, and hence to "build up" more accurate taxation district values.

"In 1925, the commission for the first time required the local assessor, when making his assessment, to classify real estate on the basis of use. The assessor in city and village is required to classify real estate into (a) residential, (b) mercantile, (c) manufacturing, (d) agricultural. The assessor in the town is required to classify property into (d) agricultural, (e) marsh, cut-over and waste, (f) timber, (a) residential, which also includes such mercantile and manufacturing property as is located in towns.

"The supervisor of assessments is required to use this classification in copying sales and assessments so far as it is possible . . .

"We have learned much about the ratio method and the assessment of property since the above classification was put into effect in 1925. We now know that the assessor rarely assesses property in different classes at the same level or standard of value . . . To apply a ratio of 58 per cent derived from sales of residential property to a large volume of mercantile property assessed at a slightly lower ratio and to manufacturing property assessed at 45 per cent, as we found after the classification was adopted was being done in one of our large cities, is not doing justice by the task which the legislature has given us to perform."⁵

3. Added Flexibility.—Thirdly, in place of a rigidly mechanical mathematical computation, the process of equalization in Wisconsin has become one which attempts to "adjust" to circumstances in a flexible manner. The supervisor no longer simply collects and collates sales data. Instead, a large number of alternative methods are now open to him.

The sales ratio method is now only one alternative, and is to be used with discretion when employed. The supervisor is required

⁴ *Manual*, p. 88.

⁵ *Manual*, pp. 104-105.

to have copied from the office of the register of deeds all recorded sales, the important facts of the sales being recorded on sales cards furnished by the Tax Commission. These sales, however, are to be used only after investigation of their bona fide character. This investigation may be made in two ways: sales may be either "officed" or "fielded." In the former case, inquiry into the usability of sales and the amount of the actual consideration involved is obtained chiefly by correspondence; in the latter, by actually visiting the property and conversing with one or both of the parties to the transaction.⁶ The sales ratio method, in this refined form, and with the ratios computed for and applied by classes as described above, is to be considered reliable only if at least 10 per cent of the property of the class is represented in the property sold. If less than 10 per cent of the property is represented, the sales ratio method is not to be used as the sole determinant of the valuation of a taxation district.⁷

A second method open to the supervisors is the appraisal method. With respect to the employment of this method, rules have been laid down as to representativeness of sample. In some cases, a single composite ratio may be computed; in others, a separate ratio for each type of property is necessary. In either event, the method is still a "ratio" method, appraisals made by the supervisors being taken as the basis of comparison instead of sales.⁸

Where the local assessments are considered to be extremely faulty, a third method is to be applied, called the "mass assessment." In such cases, the locally made assessments are to be entirely disregarded, no ratios at all being computed. Instead, the supervisor is to make a valuation of the tax district by a wholesale appraisal. The land of the district is to be divided into classes and grades, unit values established and applied, and the results summated to give total land values. The improvements of the town are then to be appraised, also in wholesale fashion, and the two summations added to give the total value of the taxation district. Sometimes a still more hasty wholesale appraisal is made, called a "mass estimate," as a check on either the sales method, the appraisal method, or a combination of the two, in districts where the local assessments are considered to be poor but still usable.⁹

4. Delegation of Powers.—Uniformity of Practice.—A considerable degree of decentralization accompanied this increased flexibility of the new system. Or perhaps it is more accurate to characterize the change as one from unitary government to a strong federal government. Prior to 1925, it was the central office which had largely determined district taxation values, on the basis of

⁶ The latter method is recommended by the Tax Commission because it tends to give the supervisors not only better results with respect to the specific properties in question, but also a first-hand knowledge of market values and factors of value in general. *Manual*, pp. 92-93.

⁷ *Manual*, pp. 105-106.

⁸ *Manual*, pp. 106-118.

⁹ Blough, *op. cit.*, p. 145 and *Manual*, pp. 119-121.

sales data submitted by the supervisors. Under the new system, the supervisors were granted wide discretion. They are permitted to employ the sales ratio method, the appraisal ratio method, the "mass estimate," and the "mass assessment," singly or in any combination, in order to build up their district taxation values. More extensive surveillance of the supervisors than before has been found necessary under the new system in order to bring about general uniformity of practice. This need has been met by requiring the supervisors to make frequent reports to the central office, and also through close supervision by the member of the Tax Commission in charge of property tax work and his field men.¹⁰

CONCLUDING OBSERVATIONS ON THE WISCONSIN SYSTEM.—The outstanding feature of the Wisconsin system of equalization is the wide choice of alternative methods open to the supervisors, thus permitting flexibility of adjustment to particular conditions. There is no doubt that it is the most advanced type of state equalization in the country today. But the potential ability of equalization, even at its best, to improve matters is definitely limited. We may best approach this general problem by analyzing equalization from two different points of view: (a) As the major remedy for inequitable assessments; (b) as a corrective, supplementary and secondary to state supervision and control.

Equalization as the Major Remedy for Inequitable Assessments

Theoretical discussion and actual legislative policies have long advanced beyond considering equalization as the major remedy for inequitable assessments. Below is a brief summary of the reasons why state equalization holds little prospect for substantial reform.

I. ATTACKS ONLY INCIDENTALLY THE MOST IMPORTANT PROBLEM.—In the first place, state equalization as its name implies, has for its chief purpose the equalization of the *state* levy on property. In some states, indeed, the local assessments are not affected at all. For example, in Wisconsin, the state equalization is part of an apportionment of the state tax by counties. Hence the valuations made by the local assessors are entirely unaltered by the equalization. The same is true of New York and a number of other states. Since it is the local levies which are of chief significance, state equalization thus leaves out the essence of the problem in a number of states, and touches it in only incidental fashion in the others.

II. CORRECTS CRUELTY, AS AMONGST AVERAGES.—Secondly, even where equalization orders affect the local rolls, they do so only in

¹⁰ Blough, *op. cit.*, pp. 146-147.

an average fashion.¹¹ For even where tax commissions have the power to order changes in assessments of individual properties, by the very nature of the task, the great bulk of the work must be concerned with adjustments as amongst entire localities, or at best of subclasses of real property, without reference to the deviations from these averages. In the correspondence with the state tax officials carried on by the writer largely in connection with Part II of this report, the writer was informed by tax commissions or state boards of equalization possessing the power of equalizing as amongst individual properties that such equalizations were rarely made, and usually only on appeal.

III. REMEDIAL RATHER THAN PREVENTATIVE IN NATURE.—In the third place, as a method of improving the quality of a state property levy in a rather crude average way, equalization is not a commendable means for achieving even this rather unambitious end. For the system first allows the ill to develop before it attempts a remedy. As Professor Carl C. Plehn has put it: "As everyone knows 'equalization' after the assessment has been made fails. It is predestined to fail. An audit after the cashier has run away with the funds, is of interest for historical purposes only. It is a pre-audit that protects. It is equalization before, not after, assessment that is effective."¹²

SUMMARY.—It was the belief that preventative measures would be far more effective, coupled with the realization of the limitations of state equalization in failing to attack the problem of individual inequality which caused the development of state supervision as a method of improving assessments. In general, it is now universally agreed that supervision is a better method than equalization, and the latter no longer ranks as the major method of improving assessments.

State Equalization as a Subsidiary Method of Reform

THE CONCEPT.—The concept of state equalization as a helpful supplement to state supervision is well illustrated by the writings of Prof. Harley L. Lutz. Prof. Lutz puts his faith in vigorous state supervision, but believes that such inequalities as still remain after every effort has been made to prevent them by energetic state guidance and supervision should be corrected by equalization.

¹¹ It is of importance to note that the word "average" is used in its technical statistical sense, and with all the connotations thereof. One frequently hears the phrase "level of assessments" as descriptive of the average assessment ratio, as *e. g.*, "The present level of assessment in New York is 90 per cent." However, in actuality the assessment ratios tend to group themselves around an average in a more or less regular bell-shaped curve. The term "level" is therefore a misnomer, the correct term is "average assessment ratio."

¹² Carl C. Plehn, "An Ideal System of State and Local Taxation," *Taxation in Washington*, Papers and Discussions of the State Tax Conference at the University of Washington, May 27-29, 1914, Bull., University of Washington, ex. ser. No. 12, p. 216

Moreover, Prof. Lutz believes that the mere knowledge on the part of assessors that equalization is being made has a salutary effect on assessors toward diminishing the need for it.

"It has been often observed throughout the United States that the principal inequalities in the distribution of the tax burden appear in the original assessment, and that the subsequent equalizing procedure does not always make adequate correction. Prevention is much better than cure. The tax commission should be able to prevent inequalities from appearing so far as this can be done by supervising the assessors in their work."¹³

"The most active supervision of the original assessment will not wholly suffice, however, for the detection and correction of all inequalities in valuation. The tax commission should have extensive powers of review and equalization which should not stop at a mere adjustment among counties, but which should extend down to the local taxing districts, to any class of property, and, if necessary, to the individual assessments. The mere possession of such powers is in this instance also insurance against the necessity of excessive use. If the tax commission is actively equipping itself with such knowledge of the facts as will enable it to check up and correct the local return, the very existence of these data and the possibility of their use act as a powerful incentive to the local officials."¹⁴

CRITICAL ANALYSIS.—General.—As presented in the preceding paragraphs, this concept of equalization is the accepted doctrine amongst many authorities, and in this subordinate role, state equalization is generally considered with approval. The writer does not agree. In his opinion, the whole system of equalization is a plant not worth cultivating, for it bears few flowers and attracts many weeds. It diverts attention and effort away from thoroughgoing improvements, and offers little in return. Perhaps the reasons for this opinion will be more apparent after these alternative methods of improvement will have been considered. For the present, let us examine more closely the concept of state equalization as presented by Prof. Lutz.

The Validity of the Basic Assumption of the Concept.—In the first place, this concept is grounded fundamentally on the supposition that state supervision will bring about satisfactory results in the majority of cases. But experience has shown that there is still plenty of equalizing to do even where the tax commissions pursue vigorous policies of supervision. And if state supervision leaves much for equalization to remedy, and if equalization operates on a wholesale, average scale, leaving many individual inequalities, and almost entirely failing to attack the problem of the equitable distribution of the local levy, is not general mediocrity in the results of the system to be expected? Unless supervision is capable of

¹³ H. L. Lutz, *The Georgia System of Revenue*, 1930, p. 112.

¹⁴ H. L. Lutz, "The State Tax Commission and the Property Tax," *Annals of the American Academy of Political and Social Science*, Vol. XCV, May 1921, p. 280.

bringing about good assessments in the vast majority of tax districts, the logical foundation of the newer concept of equalization crumbles, and the effectiveness of the whole system becomes open to serious question.

Equalization as a Psychological Deterrent.—In the second place, it is very doubtful that state equalization, even at its best, acts as a psychological deterrent to undervaluation and inequality. Indeed, it would appear that the mere existence of equalization may very well provide a stimulus to poor work on the part of the local officials. To those assessors who wish to discriminate as amongst individual properties, or to undervalue horizontally, the system of equalization makes no threat of punishment. Such assessors have nothing to lose by *attempting* to carry out their wishes. The most that can happen is that the state officials may undo their work, and even then in only a crude average manner. Thus this type of assessor has nothing to lose and something to gain by attempting that which even if discovered will neither injure him nor penalize his community. But let us start off with the proposition that most assessors are honest, but rather indifferent, which is a fair characterization of the average situation. Would not most assessors be encouraged into further inertia and laxity, feeling that another set of officials will try to straighten out matters anyway? Is it not probable that the sense of responsibility is weakened and diffused by the system of equalization rather than strengthened?

Conclusions.—Aside from this psychological consideration, which probably has varying effects on different men, and the average effect of which is somewhat conjectural, it appears to the writer that the newer concept of state equalization is only slightly more commendable than the older one. It assumes that supervision will take care of the majority of the cases, but in actual practice this has not been the case. As a matter of fact, the necessity for state equalizing has continued to be of substantial proportions even where supervision has been very energetic. The result is that the limitations of and objections to equalization as a major remedy have been applicable to equalization as a supplement to supervision.

Local Equalization

PRESENT STATUS OF LOCAL EQUALIZATION.—The following summary description, made in a study of the National Industrial Conference Board on property taxation fairly represents the present status of local equalization in the United States:

“The consensus of opinion as expressed in the reports of the various states seems to be that the revision of assessments by county boards is generally unsatisfactory. The county board is usually subject to the same influences that bear on the local assessors. The same tendency to undervalue property is evident in their adjustments. Just as the original assessor tends to set a low valuation

upon the property over which he has jurisdiction, so the county board tends to keep the assessments of property within the borders of its county below the general level of assessment for the state as a whole, if possible, in order to lighten the burden of the state tax.

"One reason for the failure of county boards to equalize property valuations is the personnel of such boards. In most cases they are composed of ex-officio members, and the equalization of assessments is only one of the minor duties of a board member. The ex-officio members, moreover, usually have little experience in the valuation of property and are frequently less able to judge values correctly than are the local assessors themselves."¹⁵

EFFORTS TOWARD MORE EFFECTIVE LOCAL EQUALIZATION—In some of the states, an attempt has been made to develop more technical and impartial local equalization. For the most part these attempts have come through the extension of the authority of the state. Thus, in Louisiana and Oklahoma, the State Tax Commission appoints one of the three members of the parish (Louisiana) and county (Oklahoma) boards.¹⁶ These boards are authorized to make adjustments as between individual properties, and hence it would appear that the arm of the state has reached down a long way in these commonwealths. In Wisconsin, the county equalization is generally made by the technically skilled and experienced supervisors of assessments. Although the law does not oblige the county board of supervisors, in whose hands the equalization is legally lodged, to accept the equalization of tax districts prepared by these representatives of the Tax Commission, this is the usual practice. Thus, in 1931, sixty-two out of seventy-one counties accepted the figures of the supervisors.¹⁷ The methods used in this county equalization are those used for purpose of the state equalization, described above. The valuations of individual properties are not altered, the equalization being confined to adjustments as amongst the localities within the county affected. This general practice of state advice and co-operation in local equalization is also carried on by the field force of the State Board of Tax Commissioners in Indiana.

In addition to the states mentioned above, there are instances of vigorous objective attempts at equalization by local boards themselves, as for example, Westchester, Broome and Erie counties in New York.¹⁸ But on the whole, the present day situation with respect to local equalization is very unsatisfactory, the task being performed either perfunctorily or with political considerations dominating.

¹⁵ National Industrial Conference Board, *State and Local Taxation of Property*, 1930, pp. 61-62.

¹⁶ See Part II, pp. 162 and 166, *supra*.

¹⁷ H. M. Groves, "Property Tax Institutions in Wisconsin," *Bulletin of the National Tax Association*, Dec. 1933, p. 77.

¹⁸ See *Report of the New York State Commission for the Revision of the Tax Laws*, 1932, Memorandum No. 3, pp. 34-36.

The Improvement of Local Equalization as a Method of Reform

As for the potentiality of assessment reform through improvement of local equalization, some measure of assessment reform could be effected. It is true that a good local equalization could get nearer to the individual inequality problem than a good state equalization, although any sort of an equalization must deal with properties in more or less average fashion. Some good, perhaps, could be accomplished by having the local boards composed of technically competent officials appointed by the state tax agency. Most probably, unless changes were also made in the original assessing organization and procedure, these officials, if permitted to revise individual assessments, would have so much drastic revising to do that there would be a continual friction between the state and the localities. On the other hand, if they were not to be permitted to revise individual assessments, the crux of the problem would remain unattacked. As for the possibility of technical, non-partisan equalization by local officials, the record gives no basis for optimism. But even were this a good probability, would it not be better to strive for good original assessment rather than good equalization? Is not the mere existence of equalization an admission of the lack of confidence in the possibility of really satisfactory initial assessments? Why attempt to improve and perfect a treatment which, even at its best, makes provision first for allowing people to become ill and then offers a cure, and not a very good one at that. Is it not better to focus attention and effort on the preventative?

Conclusions with Respect to Equalization

State equalization has in some cases reached a high degree of technical excellence, but its potentialities for substantial reform are very limited. For by its very nature it deals with averages, and touches only lightly the heart of the problem, namely individual inequality. As a supplement to supervision, the scope of its operations, if supervision were really adequate, would be to decline as supervision increased in vigor. Actually, in most cases of vigorous state supervision, energetic state equalization is also undertaken and it has been found that vigorous supervision still leaves much equalizing to do. The more there is for equalization to accomplish, the more applicable become the objections to and limitations of equalization as a major method of reform, namely, its remedial rather than preventative character, and its emphasis on the state levy and averages whereas the most important type of inequality is that between individual property owners for purposes of local levies.

Local equalization, with relatively few exceptions, has made an extremely poor showing, nor is it worthwhile attempting to improve it. For by so doing, it is an admission of defeat of the hope of equitable original assessments.

· Indeed, that is precisely what the whole system of multiple equalization amounts to: assumption of the impossibility of good initial assessing, and adjustment to this assumption. It is a development of what, from the point of view of short-sighted expediency, appeared to be the easiest way out. This cumulative accretion of patch-work has resulted in a complicated duplicatory pyramiding of boards, constituting an extreme case of overlapping, uneconomical, and ineffective governmental administration. Whatever good the whole system of equalization may do toward the betterment of assessments is more than counterbalanced by the harm it does in diverting attention from the far more effective methods of reform which may be undertaken. From this wider viewpoint, are not the establishment and improvement of equalization actually obstacles rather than aids to the development of equitable assessment of real property?

CHAPTER XIV

EFFORTS TOWARD IMPROVEMENT OF REAL PROPERTY TAXATION BY INDUCING OR FORCING FULL-VALUE ASSESSMENTS

Somewhat apart from the main current of recent efforts toward the improvement of assessments by supervision and equalization is a group of plans wherein this end is sought through the method of inducing or forcing assessments at full value. This group consists of the proposal for the separation of the sources of state and local revenue; the plan of apportionment of the state levy by local expenditures; stringent tax-rate limitation; the use of assessed valuations as a criterion for the apportionment of state-administered, locally-shared taxes, and the proposal to condition state aid on full-value assessments. Many of these plans have widely differing objectives, their operation on assessments being often in the nature of by-products. Thus, the elimination of the incentive on the part of assessors to undervalue competitively in order to avoid part of the state levy was only one of the many objectives of the policy of separation of sources. Apportionment by expenditure was designed specifically as a remedy for such competitive undervaluation. The stimulus toward full-value assessments believed to be generated by the employment of assessed valuations as a criterion in apportionment formulae of state-administered, locally-shared taxes is a partial consideration in the construction of such formulae. The pressure toward full-value assessments which tax-rate limitation may conceivably generate was a more important objective years ago than in the tax-rate limitation movement of recent times. The proposal to condition state aid on full-value assessments is aimed exclusively at bettering assessments, although it might have other effects. Because of the importance of some of these devices in other ways besides assessments, some consideration will be given to such other aspects, although attention will center principally around their actual and probable effect on assessments. Since all of the plans are grounded on the desirability of full-value assessments, our discussion may well start with a consideration of the nature of the case for the full-value standard.

The Case for Full-Value Assessments

Prior to the present depression, assessments had very rarely been made at full value. As has been shown in Part II of this report, property has been commonly assessed at less than full value, and at averages as low sometimes as 50 per cent, 33 per cent and even 25 per cent. It is generally agreed by tax authorities that the full-value standard is superior to such fractional bases. Restricting the discussion to the problem of assessment inequality, the advantages of the full-value standard are set forth below.

I INEQUALITIES MORE CONSPICUOUS.—FAVORITISM MORE DIFFICULT.—In the first place, experience has shown that once the assessor has departed from the full-value standard, there is no end to the indefiniteness of subsequent standards, and to the exercise of discretion and favoritism which inevitably follows. Under the full-value standard the public knows that assessments are supposed to be at approximately market value, and taxpayers can more readily perceive whether they are being discriminated against. When the standard is a fraction of full value, the average ratio often becomes a matter of guesswork and approximation, and favoritism may be practiced with far greater ease. Injustice is the more probable, moreover, because inequalities do not stand out so markedly and public opinion is less aware of irregularities. For example, if assessments are generally made at a 25 per cent average, and if one property is assessed at 12½ per cent and another at 50 per cent, this difference does not make so great an impression on taxpayers as if the one property were assessed at 50 per cent, and the other at 200 per cent, as would be the case under a 100 per cent standard. The explanation lies of course in the fact that the tax rate would be four times as high as the former case; hence the 37½ point differential is really equivalent to the 150 point differential.

II. BETTER CHANCE FOR CORRECTION OF INEQUALITIES.—The above example illustrates another disadvantage of the depreciated value basis. In the second situation, a 200 per cent assessment might be contested and lowered. In the former case, the taxpayer would often be unaware of the actual average ratio and might allow the 50 per cent assessment to go through without complaint. And moreover, even if he did contest it, it is harder to prove inequality than overvaluation since the former is less absolute and more indefinite.¹

SUMMARY.—In summary, we may say that the full-value standard of assessment makes inequalities more conspicuous, and in-

¹ The case for the possibility of relief under the full-value standard as compared with the case for relief under a fractional standard is not so one-sided as it once was. On the one hand, decisions of courts made in the 90's had held that property valued above the average of the community, but not above its actual worth was entitled to no relief other than that the tax officials might be compelled to increase all the lower assessments. The reasoning was that the legal requirements of full valuation would make relief by reduction illegal. The full-value requirement is now generally regarded as merely a means for achieving uniformity, and therefore no bar to reduction. See "Remedies for Unequal Property Tax Assessments," Note in *Harvard Law Review*, Vol. 46, April 1933, pp. 1000-1006. On the other hand, the trend of recent opinions is that an assessment made at more than full value is not entitled to relief unless it is shown that the property is being over-assessed relatively to the rest of the property of the community (except in cases where the overvaluation is so pronounced and gross that it may be entitled to relief under the heading of "constructive fraud.") See *American Law Reports*, Vol. 87, p. 1296, *et seq* and cases cited therein, especially *Stoman-Polk Co. v. City of Detroit et al.*, 261 Michigan 689, 247 N. W. 95 (March 1, 1933).

creases the possibilities of correction through complaints of taxpayers. These considerations combine to make the assessor more careful and fair in his work, and better the chances for rectifying the errors which do occur.

Separation of Sources

EXPECTATIONS: OPTIMISTIC.—High hopes that assessments would be very considerably improved by the inauguration of separation of sources were held at one time. Thus the California Commission on Revenue and Taxation of 1906 in recommending the policy had declared, "It is indisputable that separation would abolish the chief incentive to and cause for undervaluations and remove the chief source of the existence of discriminations."² The reasoning was as follows: "If there were no state tax to be apportioned among the counties, on the basis of the local assessed valuation, there would be no object or inducement to the assessor or to the citizens of the county to obtain a low valuation. In fact there would be more inducements to the assessor to assess the property as nearly as possible at its full market value in order to avoid inequalities between the citizens among his constituents, and to protect himself against the charge of favoritism. The probability is, that in order to enjoy the advertising effect of a low tax rate the general inclination would be for the assessor to raise the valuation rather than reduce it."³

EXPECTATIONS: PESSIMISTIC.—The above position was vigorously attacked by Prof. T. S. Adams at about this time. His analysis of the probable effect of the establishment of separation of sources on assessments was very different: "The influences or factors responsible for inefficient assessment work are so numerous that the desire to evade state taxes is really a negligible consideration. Enumerate these factors—first, the inherent difficulties of the task, next, the political atmosphere in which the assessor too often works; then, the insufficient time, insufficient pay, desire to evade county taxation, desire to favor personal friends and political associates—enumerate these factors, and it is plain, without reference to experience, that the mere discontinuance of state taxation of general property can work no appreciable improvement."⁴

ACTUAL RESULTS.—Time has shown that Prof. Adams was right. Neither in California nor in any of the other states where the policy has been applied has it brought about full-value assessments. For example, the California Tax Commission which reported in 1929 declared, "Eighteen years' experience under the system of separation shows that the withdrawal of the state direct tax has

² *Report of the Commission on Revenue and Taxation of the State of California, 1906*, p. 79.

³ *Ibid.*, pp. 62-63.

⁴ T. S. Adams, "Separation of the Sources of State and Local Revenues as a Program of Tax Reform," *Proceedings of the National Tax Association*, 1907, p. 522.

not brought about an improvement in the assessment of property. In fact an examination of the situation indicates that conditions today are worse than they were when the 1906 Commission drew its indictment."⁶ Again, Dr Mabel Newcomer, the writer of an authoritative treatise on Separation of Sources, has observed in a recent article, "In those states where separation still obtains, the hoped-for full-value assessments have not been achieved."⁷

The explanation lies along the line of thought suggested by Prof. Adams. Doubtless the attempt to evade the state tax had been an important cause of undervaluation *originally*. But merely eliminating this incentive *subsequently* is not enough to cause a movement in the opposite direction. One cannot heal a man who has been stabbed by merely removing the knife. In states which have tried separation the assessors have made no energetic effort to assess at full value. They have continued to do just about the same sort of work as before,—and even worse, because one of the concomitants of the policy thus far has been the loss of interest by the state in assessments, and decline in state supervision and guidance.⁷

"Separation with Supervision"

Undaunted by the record, the advocates of separation have not yet given up hope. Why, they ask, could not separation be linked with supervision, thus gaining the elimination of an incentive to undervalue while retaining, or even strengthening state supervision? Thus, the special investigating commission of Vermont which reported in 1930, after recommending the abolition of the state property tax, asserted:

"Though the state relinquish its power to tax listed property, it is still responsible for the proper valuation of such property, and the commission believes that the state tax department should play a greater part in the matter of local finances. With the elimination of a state tax, any activity on the part of the state could not be construed as being a mercenary interference. Equalization of the tax burden on the many parcels of property in each taxing unit is basic in a just tax system and the principal step to secure equalization is correct valuation. The state tax commissioner can be a material aid in bringing this to pass and the commission believes that listers will welcome his assistance."⁸

PRACTICABILITY: PRO.—The principle of separation with supervision is not a new one. Long ago, Prof. Edwin R. A. Seligman

⁵ *Final Report of the California Tax Commission*, 1929, p. 45.

⁶ M. Newcomer, "Tendencies in State and Local Finance and their Relation to State and Local Taxation," *Political Science Quarterly*, March 1928, p. 11.

⁷ See in this connection J. W. Martin and C. M. Stephenson, "Aspects of the Movement Toward Separation of Sources of State and Local Revenue," *The Tax Magazine*, Feb., 1933, p. 64 *et seq.*; and M. Newcomer, *Separation of State and Local Revenues in the United States*, Columbia Studies in History, Economics and Public Law, Vol. LXXVI, No. 2, 1917, p. 185.

⁸ *Report of the Vermont State Tax Commission*, 1930, p. 52.

pointed out that the relinquishment of the state real property tax did not necessarily involve diminution of state supervision over the administration of the local real property tax, when he stated that "the relegation of the general property tax to the local divisions would not in any way conflict with the principle of effective central control over local assessments. Separation of source is one thing; control of administration is quite another thing. The warmest advocates of a more efficient administration through centralization are not in any way precluded from lending their support to the policy of separation. Let us not confuse things so essentially disparate."⁹

PRACTICABILITY: CON.—On the other hand, disbelief in the possibility of the compatibility of state supervision and separation was vigorously expressed by Prof. T. S. Adams: "In the writer's opinion it is idle and academic—in the worst sense—to say that we can have general or central supervision over local taxes without the central jurisdiction making active use of the same basis of taxation. Theoretically, yes—practically, no. What local government in the United States would brook control and supervision by a state body which had no vital or real interest in the taxes and assessments concerned? On the other hand, what American legislature would make the appropriation necessary to maintain an effective central commission unless that commission were actively engaged in supervising assessments which the state government itself was to utilize?"¹⁰

ANALYSIS OF THE ISSUE.—The point at issue is still unresolved. To the writer it appears that both men were partially right. Prof. Adams in the short run; Prof. Seligman in the long run. Thus far, it is true, such cases of a definite and relatively permanent policy of separation of sources as have occurred have been accompanied by a pronounced diminution of state supervision. On the other hand, the concept that the state has a responsibility for the quality of local tax administration irrespective of the importance of a state property tax has been making headway in a number of the eastern states. Moreover, the prevalence of state supervision in other fields of state and local government indicates that the concept of narrow state responsibility in the field of assessment, as set forth by Professor Adams, is contrary to the accepted American conception of state supervision over local administration.

Education.—In the field of education, the concept of state responsibility conceived in a wide sense has long been the accepted one. The inauguration of active and successful state leadership in

⁹ Edwin R. A. Seligman, "The Separation of State and Local Revenues," constituting chap. xi of the *Essays in Taxation*, Eighth Edition, 1913, pp. 367-368.

¹⁰ T. S. Adams, "Separation of State and Local Revenues," *Annals of the American Academy of Political and Social Science*, Vol. LVIII, March, 1915, pp. 134-135.

the field of local school administration by Horace Mann and Henry Barnard in New England in the first half of the nineteenth century was followed by universal acceptance of the principle by all the states later, and the development of the methods and ideas of these men and their followers.¹¹

At the present time, in addition to direct administration of state schools of various types, the state actively participates in the supervision of the administration of local schools. The various types of control employed include the mechanisms of reports; periodic inspection; dissemination of advice, by means of conventions of superintendents, teachers' institutes, and correspondence; the prescription of the course of study; prescription of text books; and the examination of candidates for teaching positions. To be more specific on the statutory situation, general advisory and supervisory powers are possessed by a state administrative agency in practically all of the states. In some forty-four states, the state agency sets qualifying examinations, constituting an important indirect control of personnel. In some thirty states, the state may prescribe the course of study; and in about twenty-nine states, either the choice of text books may be limited to selection from a list prepared by the state agency or the text books are directly prescribed by the state authorities.¹²

Health—Similarly with respect to health administration. After the establishment of the first state board of health by Massachusetts in 1869, other commonwealths followed soon afterward, and from small beginnings the state has come to be entrusted with large powers of supervision over local health administration.¹³ Indeed, the main lines of local health activity are generally laid down by the use of the ordinance-making power, which has been granted to the state health agency in every state but one.

In all but six states, the state supervising officials are authorized to take over the complete administration of the local health service. Upon the failure of a local board to enforce the rules and regulations of a state department, or to handle the administration of the local office efficiently, the state department may step in, and

¹¹ See E. P. Cubberly, *Public Education in the United States*, 1919 p. 155 *et seq.*; and by the same author, *Public School Administration*, 1918, pp. 1-34.

¹² S. Wallace, *State Supervision over Cities in the United States*, 1928, chap. v.

¹³ The Asiatic cholera had invaded Massachusetts in 1849 and a state commission had been appointed to propose a plan for a sanitary survey. The commission recommended, amongst other things, that each town be required to appoint a board of health and that a supervisory state board be established. Some twenty years later, a state board with powers limited to making investigations, gathering information, disseminating advice and framing legislation, was established. It may be mentioned that a State Board of Health had been established in Louisiana in 1865, but this board at this time was merely a body for the enforcement of quarantine regulations at the port of New Orleans. For further details see J. M. Mathews, *A Report on Public Health Administration* prepared for the Efficiency and Economy Committee of Illinois, 1914, *passim*, and Charles V. Chapin, "State Boards of Health," *Proceedings American Political Science Association*, 1904, Vol. 1, p. 143 *et. seq.*

through the medium of its own personnel, take over the conduct of all local activities. Similar action may be taken in most of these states in times of epidemic, irrespective of the efficiency or inefficiency of local health officers.

Moreover, various specific phases of health administration have been singled out for extensive state control. Thus, in thirty-one states, state approval of all plans and specifications relative to the construction of any water supply system is necessary before any municipality may begin construction work; in at least twenty-two states, the continued operation of these systems is at all times subject to such approval; and specific orders relative to their operation may be issued in at least thirty-three other states. Another example is sewage. In thirty-one states, state approval of all sewer construction must be obtained and in twenty-six states, state orders may be issued relative to construction and operation. Wide powers have also been granted to the states with respect to swimming pools, hospitals and places of public assembly.¹⁴

Public Welfare: Dependency and Delinquency.—The field of public welfare agencies is also worth mentioning in this connection. In this case the general development has been for the state to take over directly the treatment of the more complex cases, and to develop supervision of the local institutions, with whom the care of the less seriously socially maladjusted individuals has remained. Thus, the care of the blind, the deaf, the dumb, the insane, and the more dangerous and hardened criminals has been largely taken over by the state directly. The most important local institutions of charity and correction, namely local jails, poorhouses, and reform schools, are now under state supervision.¹⁵ The mechanisms of such supervision include reports; inspection; advice; and the approval of certain actions, such as the erection of new buildings.¹⁶

PRACTICABILITY: CONCLUSIONS.—From these examples of the development of a sense of state responsibility for the administration of functions performed by local units of government, it would appear that, so far as the prevalent American attitude toward state supervision of local administration is concerned, the levy of a state property tax is not an essential prerequisite to state supervision and control over assessments. However, there is one important respect in which the function of supervision of local tax administration differs from the other functions cited, a difference which is probably largely responsible for the retarded appearance of the newer concept in this field. Whereas the extension of the participation of the state in such fields as health and education is welcomed by a populace which either demands it or is easily con-

¹⁴ Wallace, *op. cit.*, chap. iv.

¹⁵ For an exhaustive treatment of this subject, see the collection of readings prepared by Sophonisba P. Breckinridge. *Public Welfare Administration in the United States. Select Documents*, 1927.

¹⁶ Wallace, *op. cit.*, chap. vi.

vinced of its beneficial effect, efficiency in tax administration is quite another matter. It is an old and wise saying that "taxes make few friends and many enemies." Progress toward the development of a concept of wide state responsibility in this field is therefore subject to this consideration.

From the viewpoint of sound political science, the responsibility of the state in the matter should not depend on the levy of a state property tax. The sum total of governmental administration, national, state and local, is a mechanism through which men accomplish the attainment of certain services which they desire to be collectively performed. If one part of the mechanism is not working satisfactorily, assistance by another part is to their interest. This rationalistic attitude toward government has already found favor in many spheres of state and local administration and has made a beginning in the field of taxation. It is the attitude which has the greatest "survival value" sociologically, and it should eventually succeed the traditionalistic attitude described by Prof. Adams, in the field of assessments.

CONCLUDING OBSERVATIONS ON "SEPARATION WITH SUPERVISION."
—We may regard the proposal for separation with supervision as practicable. However, its virtue beyond this is small. It is true that combined with supervision, the chances for starting efforts toward full value assessments would be greater than under separation alone. But the task would still be a very formidable one. In those states which already have supervision, the reform would consist in the introduction of separation. This could hardly be expected to start a movement toward full-value assessments, for all the forces making for undervaluation (namely, individual discrimination; the desire to avoid the possibility of taxpayers' complaints, lack of knowledge and facilities; inertia; habit; and vested interests) would most probably be far more powerful than the forces generated by separation with supervision. Moreover, it is very doubtful whether separation is commendable as a general fiscal policy. Before passing final judgment, it would be well, therefore, to consider separation from this broader point of view. Hence, a brief treatment of the development of the proposal for separation and an analysis of its merit as a general fiscal policy is given below.

Principle Objectives of the Proposal for Separation of Sources

GERMINATING FORCES AND BASIC ASPIRATIONS.—As the general property tax system broke down and special taxes were developed, such as public utility taxes, corporation taxes, death duties, etc., it was soon found that the newer taxes could be administered only by the states. The thought of the advocates of separation was along this order: "The development of these special taxes is very desirable. Let us promote this development by having the states divorce themselves entirely from the property tax. This will stimulate the development of taxes more appropriate to our advanced economy. At the same time, the elimination of the incentive to undervalue

to avoid the state property tax should result in marked improvement in assessments. Hence the net effect of separation will be a more advanced state fiscal system and better local tax administration."

CRITICAL ANALYSIS.—We have already seen that separation has not resulted in any improvement in assessments. As a means to its most important end, namely, the development of state taxes for reaching new forms of tax-paying ability caused by economic and social development, its intentions were good, but the mechanism suggested was not a happy one. Below is a brief summary of its principal defects.

I. Inadvisability of Rigid Separation.—As ordinarily conceived, the policy assumes that the division of sources of property taxes to the localities and taxes on public utility corporations, inheritance taxes, and other "special" taxes to the states is an appropriate one for modern economic conditions. Actually, its appropriateness is very limited. In the first place, it can be appropriate only in those states where industrialization has proceeded far enough to permit reliance of the state revenue system on other than the property norm. And in the second place, even in such states, this particular division may not necessarily be appropriate. For example, certain states may have more than sufficient sources for state fiscal purposes while their localities may not have enough from only the property base. Or the latter may derive enough revenue from taxing property (mainly real property), but in so doing may cause real property to bear a disproportionate share of the total burden. Where other sources of tax revenues are plentiful, as is the case in economically advanced states a policy of distribution of yield of state-administered taxes may well be a better adjustment. Separation may be adopted for a time in states where it is appropriate, but it should never be adopted in rigid form. It should not be embedded in state constitutions. Ease of adjustment to subsequent economic development should be maintained.

II. Inadvisability of Complete Separation.—Moreover even though a state may have abundant sources of tax revenue, it is better to minimize the importance of a state property tax rather than completely to abolish it. One can believe in the beneficial effects of exposure of the body to sunlight and air without recommending complete nudism. Similarly, one can believe in "special" taxes for financing a state fiscal system without stripping it bare of a useful, and under certain circumstances, an essential elastic element.

CONCLUSIONS.—With the basic philosophy which inspired the proposal for separation of sources, namely, the desire to accelerate the development of modern special taxes so as to utilize the new tax norms and sources which have emerged in recent years, there can be little disagreement. But the establishment of the policy in rigid constitutional form cannot be commended. The policy is only one

of many types of adjustment of general fiscal policy to economic substratum. It may be appropriate for only a short time, in which case further adjustments will be impeded if the policy has been embedded in the state constitution. Moreover, it is difficult to see why the state property tax should be completely abolished. Modern state taxes can be developed just as well with a very small property tax in the state fiscal system. The one advantage which had been expected from complete abandonment had been the elimination of undervaluation in local property tax assessments, but experience has shown that this expectation has not been fulfilled. On the other hand, the value of the elasticity which a direct property tax contributes to a state revenue system has been amply demonstrated.¹⁷

Apportionment by Expenditure

The belief that competitive undervaluation in order to evade part of the state property tax was responsible for many of the evils existing in property tax assessments brought forward another plan designed to eliminate such competitive undervaluation, commonly known as "Apportionment by Expenditure." Under this plan, the state property tax is retained, but the method of apportionment is changed from assessed valuations to actual tax collections. This plan is used by Connecticut (when a state tax is levied) and in Rhode Island. Under the usual system, the localities may assess at low average ratios (thus avoiding part of the state levy) and still obtain sufficient funds for their own needs by merely raising their local tax rates. On the other hand, apportionment by tax collections takes the rate as well as the base into consideration. Hence, the only loophole to any attempt at evasion is actual curtailment of local expenditures,—a rather high price to pay for such evasion and a course which few communities would presumably care to take.

It is not necessary to go into the problem of whether this basis of apportionment is more equitable or less equitable than the usual one. For the plan gives little hope for the attainment of its chief objective, namely, revision of assessments to full value. As in the case of separation of sources, apportionment by expenditure fails to take into account all of the many other factors responsible for poor assessments, and fails to perceive that *whereas the desire to avoid the state levy may have been an important cause of undervaluation originally, subsequent elimination of this incentive will not be sufficient to start a movement toward full-value assessments.*

Tax Rate Limitation Laws

Whereas the plans of separation of sources and apportionment by expenditure envisioned merely the *elimination* of the incentive to

¹⁷ Cf. e. g. Newcomer: ". . . inelasticity has thus far proven to be the insurmountable obstacle which has prevented the continuation of separation" M. Newcomer, *Separation of State and Local Revenues in the United States*, 1917, p. 190.

undervalue, early stringent tax rate limitation laws sometimes sought the *forcing* of full-value assessments as one of their objectives. Experience has shown that this end has not been achieved by this means.

FAILURE TO FORCE FULL-VALUE ASSESSMENTS.—Full-value assessments did not result from stringent tax-rate limitation when it was tried in Ohio in the decade 1911-1921. Dr. R. C. Atkinson, who has made a careful study of the Ohio experience, has summarized the assessment aspect of this legislation as follows:

“One of the aims of the sponsors of the law was to secure the assessment of real estate at its true value. The appraisal made when the Smith Law was enacted unquestionably represented a vast improvement over earlier assessments, and in some parts of the state represented a fair approximation of true value. The pressure of tax limitation did not, however, force the maintenance of any such standard throughout the succeeding decade. Though property values increased greatly during the period, few counties raised their assessments prior to 1920 and most Ohio counties were not reappraised between 1911 and 1926. In spite of the dire need for increased revenue, popularly elected county assessing officers simply would not reappraise real estate and no state or local authority had the temerity to require such action. As a means of insuring a high level of assessments, the tax limit law was totally unsuccessful.”¹⁸

OTHER OBJECTIVES.—AN UNSOUND AND DANGEROUS MECHANISM.—Stringent tax rate limitation is moreover, a poor way to achieve general fiscal reform. For example, in Ohio, instead of resulting in economy and keeping taxes down as had been contemplated, it resulted in debts, financial manipulations and actual increase of the tax burden:

“Under the pressure of inadequate revenues, local governments went heavily into debt for the financing of current operation. In the early years of the Smith Law the chief effect was to force the issuance of bonds for the financing of improvements previously financed directly from taxation. Whereas a large amount of school construction had formerly been financed on a pay-as-you-go basis, this policy had to be entirely abandoned. By 1915, however, the larger units began to find it impossible to balance their budgets.

¹⁸ R. C. Atkinson, “Stringent Tax Limitation and its Effects in Ohio,” in Public Administration Service No. 36, *Property Tax Limitation Laws* (Glen Leet and Robert M. Paige, Editors), 1934, p. 68. The 1910 assessment of real estate averaged over 80 per cent of full value. This high average assessment ratio was due to the efforts of the newly created State Tax Commission, and to the co-operative attitude which the Smith Law of 1911 helped to cause in the minds of the local officials. Indeed, one of the major reasons for the law was to prevent taxes from increasing as a result of the general reappraisal in which the basis of assessment was changed from about 30 per cent to full value. By 1920, assessments of real property represented not more than 50 per cent of actual market value. R. C. Atkinson, *The Effects of Tax Limitation upon Local Finance in Ohio 1911-1922*, 1923, pp. 55-57, and 89.

Deficits became the general thing. Cincinnati ended every year from 1915 to 1921, with a heavy deficit, as did Cleveland and Columbus in all except one of those six years, and Toledo and Dayton in all but two.

"Of course, the situation could only be met by the issuance of deficiency bonds. By 1921, Ohio local governments had some \$39,000,000 of deficiency bonds outstanding in a total debt of \$608,000,000. One-fifth of the indebtedness of the City of Cleveland, exclusive of utility and special assessment debt, consisted of deficiency bonds, and in some smaller cities such bonds ran as high as thirty or even forty per cent of the total. Including street repair bonds and the like, Ohio local governments probably issued more than \$50,000,000 of bonds for financing current expenses before the Smith Law limitations were finally relaxed.

"In addition to wholesale reliance on deficiency bonds, many other financial abuses arose. Sinking fund requirements were commonly ignored, and in many cases sinking fund balances were diverted to the payment of operating expenses. Bond funds were likewise diverted. Of course, all this was illegal, but under the pressure of dire necessity the law was ignored in order to meet the cost of essential services. Local public opinion in cities insisted upon the maintenance of a minimum of public service even though the limitations imposed by state law made it impossible to raise sufficient revenue for its financing.

"The total burden saddled on subsequent taxpayers by this decade of rigid tax limitation cannot be determined. Counting deficiency bonds and other bonds for current operation and for improvements which would normally have been financed from direct taxation, the interest on these bonds, the failure to maintain sinking funds, and the added year of interest necessitated by the refunding of maturing indebtedness, it is not unlikely that the Smith Law shifted a burden of around \$100,000,000 onto the backs of later taxpayers.

"Undoubtedly, many needless expenditures were prevented by the shortage of funds, yet plenty of first class examples of extravagance could be culled from this period of financial stringency. That the level of administrative efficiency was raised is altogether improbable. Both in Cleveland and in Cincinnati the period from 1916 to 1922 was marked by serious maladministration. Poverty alone does not produce efficiency.

"Had the latter part of the period not been attended by changes in the price level, the situation would not have become so acute, but even before 1915 most of the large cities had begun to feel the pinch of inadequate revenues, and deficits had begun to appear. In view of recent efforts to write tax limits into state constitutions, it is pertinent to observe how quickly conditions may change and disaster occur. When the Smith Law was enacted in 1911, fifteen mills afforded a modest margin for the expansion of local revenues, but by 1918 it had become hopelessly inadequate.

"Ohio's ten-year experiment with rigid tax rate limitation was a dismal failure, in fact nothing short of a calamity. After an

intensive study of the effects of the Smith Law the author is convinced that the imposition of fixed tax limits, not subject to modification to fit local requirements, is an entirely unsound and dangerous policy.¹⁹

CONCLUDING OBSERVATIONS.—There is no reason for believing that one of the effects of stringent tax rate limitation is full-value assessments. Debts and financial manipulations offer what appear to local administrators easier ways out. As a matter of fact, tax-rate limits may cause assessors to undervalue even more than otherwise. For example, it was found that the psychological effect of the 2 per cent tax-rate limit provision applying to the seven largest cities of New York was to cause assessors actually to underassess,—in order to allow for a margin of increase when needed.²⁰ And viewed as a general fiscal measure for the attainment of other objectives (themselves often desirable) it has proven a blundering and ineffective device. Prof. Simeon E. Leland has summarized the case against property tax-rate limit laws in the concluding chapter of a compendium of articles by prominent authorities, edited by Glen Leet and Robert M. Paige as follows:

“Finally, these conclusions seem warranted to the author of this chapter, if the evidence in this volume is carefully weighed. First, that tax-limitation laws have not limited property taxes; secondly, that they have not accomplished the reformation of the state—local tax systems, at least not yet; thirdly, that they have not produced economy in government, nor are they either a logical or constructive avenue of approach to that goal; and lastly, that where tried, this scheme has so frequently curtailed governmental service and produced fiscal chaos that the plan has been permanently discredited.”²¹

The Utilization of Assessed Valuations as a Criterion of Apportionment for State-Administered, Locally-Shared Taxes

THE PLAN AS APPLIED IN NEW YORK.—A method for inducing full-value assessment which is less drastic and less dangerous than stringent tax-limit legislation is the device of using assessed values as a basis for local shares of state-administered taxes. The New York personal income tax is a good illustration of the employment of this method. Part of the proceeds of this tax are returned to the localities on the basis of assessed valuations. Hence, as concerns shares of the state personal income tax, the higher the average assessment ratio of a locality, the greater its proportionate share of the state personal income tax receipts. It was one of the

¹⁹ R. C. Atkinson, “Stringent Tax Limitation and Its Effects in Ohio,” *loc. cit.*, pp. 69-70.

²⁰ *Report of the New York State Commission for the Revision of the Tax Laws, 1932*, Memorandum No. 8. “The Revenue Problem of Tax-Limit Cities” (by Dr. Louis Shere).

²¹ Simeon E. Leland, “Alternatives: A Constructive Outlook,” Public Administration Service No. 36, *Tax Limitation Laws* (Glen Leet and Robert M. Paige, Editors), *Statements by Twenty-four Authorities, 1934*, p. 87.

specific purposes of the framers of the allocation basis to induce a movement toward full-value assessments. Has it succeeded in attaining this objective?

EFFECTIVENESS: THE POND INVESTIGATION.—In a special report prepared by Dr. C. B. Pond for the New York State Tax Commission, an attempt was made to discover whether the inducement to the localities had succeeded in bringing forth results.²² Two types of tests were made: (a) a statistical tabulation of assessment ratios, arranged by years; (b) a direct inquiry to assessors as to the force of the provision on their mental processes.

The Statistical Test.—In the statistical test, three towns from each county were selected as representative of the towns of the state; all of the cities were included. Certain years were selected, namely, 1920, 1923, 1925 and 1928. The ratios were classified into two classes, those below 70 per cent and those above 70 per cent. This test revealed a very slight trend toward higher assessment ratios for the towns and a trend of decrease for the cities.²³

Since the amounts of income tax monies involved are much greater for the cities, the incentive, if of any force, should show up in the city ratios. Hence the decrease during the period of the urban ratios indicates the incentive to be of negligible importance.

One can properly interpret the facts of this investigation, however, only if one bears in mind two important factors (a) value movements; (b) the lag of assessments behind value movements. Because of the lag of assessed valuations behind real values, if urban property values tended to rise during the period, the urban assessment ratios would tend to decline; and if rural values tended to decrease the rural assessment ratios would tend to increase. Perhaps this furnishes an explanation for the chief causes of the behavior of the ratios. As stated above, the tables did show a trend toward declining urban ratios and increasing rural ratios. At any rate, the statistical evidence definitely pointed to the conclusion that the income tax consideration has not been of such force that it has caused a general movement toward full-value assessments.

The Direct Inquiry.—The direct inquiry to the assessors consisted of the inclusion in a questionnaire of the following question, "What has prevented the towns in your county (your city) from raising their (its) total assessments and thereby receiving a larger portion of the State income tax?"

The replies indicated that the inducement was not very powerful in the minds of the officials.

"Assessors in 7 cities and 17 towns agreed that the chief reasons for failing to raise valuations under this law are those which account for underassessment in the first place. In other words,

²² C. B. Pond, *Full Value Real Estate Assessment as a Prerequisite to State Aid in New York*, Special Report of the State Tax Commission, No. 3, 1931, pp. 164-169.

²³ *Ibid.*, pp. 165-169.

the lure of more income tax money has been unable to dislodge existing deterrents to lawful assessment. After all, who will risk his position as assessor in order to gain a few more dollars of income tax money for his town? The board of assessors in one city went so far as to declare that in their opinion no city in the State had raised its assessments to full value for the purpose of augmenting income tax returns.

"Three town assessors remarked that the failure of local officials to realize the benefits of higher assessments under the terms of the income tax law explained the dearth of interest. Although no facts are at hand to support this statement, ignorance of the law is undoubtedly a factor in the situation."²⁴

Summary.—In the light of this evidence, it would appear that the use of assessed valuations as a criterion of apportionment for the state-administered locally-shared income tax of New York has not resulted in a perceptible tendency toward the making of full-value assessments. The reason is not far to seek. The plan generates but one feeble force to contend with the multiplicity of powerful forces making for undervaluation and discrimination.

The Proposal to Condition State Aid Upon Full-Value Assessments

DIFFERENTIATION FROM CRITERION OF APPORTIONMENT PLAN.—Several years ago, the New York State Tax Commission assigned as one of its subjects for investigation the possibility of conditioning state aid upon the existence of respectable assessments. Dr. C. B. Pond, whose study of the effect of using assessed valuations as the criterion of apportionment of the state personal income tax has just been described, made this study for the commission. He differentiates the apportionment criterion plan from the state-aid plan as follows:

"Only a very small fraction of the \$32,000,000 of income tax returned hinges on the possibility of a relative increase in assessments. But if full value assessment were made a prerequisite to all State aid, \$147,000,000 could be withheld to make good the threat. The failure of the income tax returns to raise assessments casts no reflection on the power of conditioned State aid to enforce legal or minimum standards. The two methods are very different, because the present method of apportioning the income tax money does not withhold it if assessments are under full value. The localities will face quite another problem when they have to choose between underassessment and all State aid."²⁵

THE PLAN AS PROPOSED BY DR. POND—Dr. Pond states that the only change in the law necessary to put the plan in operation would be to provide that no tax district will be allowed to participate in State aid unless the Tax Commission is satisfied that the tax district assesses real estate at full value. He then makes various

²⁴ *Ibid.*, p. 164.

²⁵ Pond, *op. cit.*, p. 169.

suggestions as to the way that the Tax Commission might enforce this provision. The following is a summary of Dr. Pond's proposal, in his own words:

"To give legal effect to the scheme, it will only be necessary to insert a provision in the Tax Law of New York stating that no tax district will be eligible for State aid in any form, whether returned taxes or roads and school aid, until the Tax Commission is satisfied that the tax district assesses real estate at full value. The locality should be allowed a period of years, one year ought to suffice, in which it must bring its assessments up to the required level if it wishes to share in State aid. The difficulties of accurately determining full value are such that it might prove expedient to term, temporarily at least, all assessments between 90 and 110 per cent of full value as meeting the legal requirement. The obvious drawbacks to a precise measurement make the zoning of full value desirable, since it is impossible to ascertain with infallible accuracy the standard by which the assessment ratio is determined. Full value, thus defined, will also allow for differences of opinion which are bound to arise, even when both parties to the dispute are acting in good faith. Those localities whose conscientious efforts at valuation were slightly at variance with State opinion would be less apt to lose their destined portions of State contributions. In the process of time, the limits of full value may be contracted until they closely approximate the 100 per cent mark, for differences will be mutually adjusted through the exchange of data and the employment of accurate methods of assessment.

"It might be wise to offer the localities the alternative of paying the costs of a complete reassessment by the Tax Commission. If this were included, a locality which had made every effort to comply with the law as to full value, but had failed to meet the requirement, would still have the opportunity to share in State aid, as would any locality that cared to submit to a State checkup as a basis for receiving financial disbursements. As has already been said, the concept of full value is far from absolute and the problem of unintentional error is always great, under present assessment technique. Such an alternative would permit a locality to retrieve its mistakes and would give it a chance to escape the fate of those which purposely under-assessed. Before resorting to this alternative, State aid foregone would be weighed against the charges of reassessment by the State. It should be remembered that the cost of reassessing would in reality be spread over many years, for revaluation would furnish a catalog of values and a standard of comparison for future years. Viewed in this light the terms of the alternative appear exceedingly reasonable and the locality which is anxious to qualify for State funds will scarcely care to ignore it.

"The Tax Commission would set up its own machinery for checking the assessment ratios of the various tax districts. It might establish a tax office in each county or divide the State into regions for the purpose of keeping track of assessments. All the facts pertinent to the evaluation of real property would be kept in the

tax office as a matter of permanent record. Sales data and information from property owners could be used where possible and expert appraisal resorted to when necessary. Each piece of real estate could be definitely located upon a tax map, thereby keeping an accurate record of all properties. A staff of workers would have to be employed adequately to conduct the affairs of each office. All this is merely by way of suggestion and there are doubtless other and better methods of effectively coping with the situation than have been mentioned in the rough outline presented here. If so, they should be used, because the plea is for the principle rather than the method of applying it, and the best procedure should be employed. Time, experience and the wisdom of many tax experts will be important factors in the development of highly effective practices.

"Property that is common to two or more jurisdictions should be assessed as a going concern and the whole broken up into constituencies commensurate with the relative amount of property involved. Assessment of such property is best accomplished by a central authority under the supervision of the Tax Commission. This body might be empowered to evaluate property which the local assessors certify to it as being unusually difficult to evaluate.

"All of the above outlined procedure fails to interfere expressly with the functions of local assessors. If these men go about their work honestly and utilize the help offered them by central assessment and State figures, much closer approximations to full value will inevitably result. If the local assessors choose to under-assess, the State need take no more notice of them than at present, for the State will have no power of compulsion. Legally, the assessors will be as free as ever to assess as they please, although the consequences will be materially altered. The retention of the office of local assessor will serve as a check upon the State figures, since the assessors are more familiar with local conditions than an outsider. In order completely to safeguard the validity of local assessment, an appeal to the Tax Commission and ultimately to the courts might be provided in case of a dispute between local and State officials over any piece of property. Once the process of State and local assessments as mutual checks has been set going, the two should approach closer together as the cumulative knowledge and experience under such a system harmonizes differences and builds up an accurate catalog of values."

* * * * *

"Once the scheme has been incorporated into law, what can reasonably be expected of it? The obvious intent is to remedy the injustice which now prevails in the taxation of real property by equalizing tax burdens under a program of full-value assessment. In order to accomplish this, the cause of modern under-assessment must be eradicated in some way. If it is possible to subsume the multifarious causes of low assessment under three main categories, these may be designated as the lack of accurate methods of value determination, the lack of competent assessors and the incentive to

under-assess. The full-value proposal, as outlined, furnishes no new knowledge of values and offers no innovation in assessment technique. It is based upon the assumption that available knowledge and sources of information are susceptible of more careful usage than the desultory and intentional under-assessment which has proved itself inimical to all the canons of just taxation. The proposal provides a powerful incentive to assess at full value by making all State aid conditional upon 100 per cent valuation. This might reasonably be expected to induce the selection of more competent assessors. Since the scheme does not embody a definite formula for ascertaining full value, it is unreasonable to expect a sudden and sweeping transformation to the hypothetical standard. The creation of a strong incentive to full-value assessment, however, establishes a standard which should raise most assessments to the point where they would be included within the sphere of tolerance previously mentioned, the region between 90 and 110 per cent of full value. In the course of time, more accurate assessment will come as the result of experience. The localities have never made a united attempt to approximate full value and concerted action in this direction should be decidedly fruitful.

"If the scheme fails to result in a better distribution of the real estate tax burden it will be undeserving of continued support. Since the real estate tax is a percentage tax, justice is proportional to the uniformity of assessment and in so far as deviations from full value exist, just so far will inequalities remain. It will be impossible for the Tax Commission, in checking the assessments of tax districts, to review every parcel of real estate in a locality. The sampling process must be employed, much as in the determination of equalization ratios, and the rating which any tax district receives will of necessity be an average rating."²⁶

CRITICAL ANALYSIS OF THE PROPOSAL AS SET FORTH BY POND.—As put forward by Dr. Pond, the writer is thoroughly opposed to the proposal. The mechanism of conditioned State aid may be used to good advantage in the field of assessments, as a method of strengthening State supervision.²⁷ But in the form recommended by Dr. Pond, it has a number of serious flaws.

The Full-Value Test: Inadequate or Impracticable.—In the first place, the full-value zone test does not constitute an adequate requirement for the "respectable" assessment which the Tax Commission had in mind in assigning the subject. If, as Dr. Pond has stated, the Tax Commission is to judge full value on an *average* basis, as in the determination of equalization ratios, the most probable effect of the plan would be for the localities to multiply the whole roll by a single figure which would bring up the average assessment ratio to the prescribed zone. In so doing, many inequalities would be made more conspicuous, and taxpayers who

²⁶ Pond, *op. cit.*, pp. 153-155.

²⁷ See p. —, *infra*.

were assessed at ratios substantially above full value would stand a better chance than before for relief if they made complaint; but it is a poor system of assessment which depends upon taxpayers complaints and suits for the attainment of equity. Dr. Pond declares:

"A tremendous forward step would be made if all equalization ratios were confined between 90 and 110 per cent of full value. The latest figures show that 136 towns, villages and cities are now assessing within these limits. If this is possible under present conditions, who can say what is impossible under such favorable circumstances as the full value scheme would create?"²⁸

In the opinion of the writer, Dr. Pond places far greater reliance on the importance of the average assessment ratio than it deserves. All available evidence indicates that assessments in New York, with the possible exception of some of the larger cities, are very poor. This statement covers the 136 towns, villages and cities assessing at average ratios of between 90 and 110 per cent mentioned by Pond. Because of the combined effect of the fall in real property values during the depression and the lag of assessed valuations behind real values, assessments in many cities, towns and villages all over the country are being made at average ratios of between 90-110 per cent. But all available evidence indicates that there is great inequality nevertheless. The plain fact of the matter is that while a high assessment ratio ordinarily is indicative of better assessments than a low assessment ratio, it is never conclusive proof of good assessing. And during a depression, the pronounced lag of assessed valuations behind real values may cause a high average assessment ratio to be almost utterly meaningless as an index of the equitableness of assessments. In fine, enforcement of the "full-value" standard on an *average* basis could result in only minor improvements, chiefly horizontal adjustments, leaving the great mass of individual inequality unaltered, or only slightly altered.

On the other hand, if the Tax Commission were to attempt to require that all *individual* assessments in a city or town be between 90 and 110 per cent (which appears to be the ultimate objective of Dr. Pond) it would be demanding a degree of assessment efficiency, which, it is safe to say, has never been achieved in any jurisdiction in the United States. Such assessments have not been made in the best assessed cities in the country. To make such a standard a prerequisite for State aid would be futile.

If the full-value test is to be applied on an average basis, it is inadequate; if it is to be applied on an individual basis, it is impracticable.

More Commendable Requirements: A Low Coefficient of Dispersion—The Tax Commission would do much better to require a low coefficient of dispersion instead of "full value" assessments.

²⁸ *Ibid.*, p. 173.

This index measures the degree of inequality among individual property assessments. It furnishes both an adequate and practicable test of assessment respectability. (See Part II, Methodological Introduction.) It could be set at a moderate figure, such as 20 per cent, for the first few years, and later gradually reduced.

Minimum Standards with Respect to Equipment, Technique and Personnel.—Another alternative would be for the Tax Commission to require minimum standards with respect to the equipment, technique and personnel of local assessment administration. Thus the State could require the utilization of tax maps; of sales records and other value data; of approved unit value techniques; and the qualification of local assessors by successfully passing State examinations. These standards would not have to be rigidly uniform, but could be varied according to the needs of the different types of localities. For example, the standards could be varied according to size for the cities, and by types of land utilization for the rural areas.

Combination of Requirements.—Or the State might require satisfactory compliance with both types of conditions described above. It could require first that no locality would be eligible for State aid unless it met the prescribed standards of assessment equipment, technique and personnel. It could then use the ratio study method of investigation of assessment inequality (utilizing sales data, and its own appraisals where necessary) to test the operation of the systems. Where assessment inequality was found to be over the maximum allowed, a warning would be issued that unless the situation were corrected by the following year, State aid would be withheld.

Rôle of the State.—With such a set of tests, the rôle of the State would be quite different from that described by Dr. Pond. Instead of setting up county or regional assessment offices, the present supervisory personnel, the Bureau of Local Assessments, Land Tax and Equalization could be used as a substantial nucleus for a somewhat larger organization. Officials experienced in preparing average assessment ratios on the basis of sales data would compute coefficients of dispersion based on such data, when possible, and when not, on appraisals made by designated members of the new organization. Instead of the State tax officials locating "each piece of property upon a tax map" the State would be charged with only the responsibility of seeing to it that the localities were properly using the required maps. In short, the rôle of the State would be supervisory, not duplicatory, as the suggestions of Dr. Pond would seem to make it.

Other Objections: Needless Uncertainty, Friction and Delay.—If such a set of assessment standards and tests were required as a prerequisite to sharing in State aid in New York, the plan would eventually result in a substantial amount of improvement. But

there are much better ways for attaining this objective. The method of indirect pressure always involves uncertainty of operation, delay, and friction. Experience with drastic tax-rate limitation, for example, indicates that financial troubles, curtailment of necessary governmental services, and accumulation of debts might very conceivably occur before a community would become sufficiently aroused to take the necessary steps toward good assessing. The plan would be almost certain to involve much short-run friction and hardship. Indeed, it is a very good probability that these short-run effects would produce a public reaction aimed not at poor assessing, as is the intent of the plan, but at the conditioned aid provision itself, causing abandonment of the method before the long-run effects had a chance even to emerge.

ORTHODOX CONDITIONED STATE AID.—If the mechanism of conditioned State aid were used in more orthodox fashion, *i. e., if the State were to grant money to the localities to be used for assessing purposes, provided that certain standards were maintained*, much good, and certainly no harm could result. In this form, the mechanism has interesting possibilities. Further discussion of it, however, is best deferred to a later section of this report.²⁹

Summary

This concludes our survey of indirect methods of achieving improvement in assessments by inducing or forcing full-value assessments. It is very doubtful whether separation of sources, apportionment by expenditure, the employment of assessed valuations as a criterion in apportionment formulae of State-administered, locally-shared taxes, or tax-rate limitation laws have had any substantial effect toward the attainment of better assessments. The latest member of this family, the proposal to condition all State aid upon full-value assessments is subject to two serious flaws. First, "full-value" is either an inadequate requirement or so drastic a requirement as to be impracticable, depending upon whether it is to be applied on an average or on an individual basis. Secondly, the plan seeks to achieve reform by indirect pressure. Such plans may and have worked out in unexpected and dangerous fashion, and at best entail needless friction and hardship. It is far better to attack the problem of inequitable assessment by direct methods. Before considering direct remedies, however, it would be well first to summarize the present status of assessing methods and techniques in the United States. This will be done in the next chapter.

²⁹ See chapters xvii and xviii, *infra*.

CHAPTER XV

DEVELOPMENT AND PRESENT STATUS OF ASSESSMENT METHODS AND TECHNIQUES

A description and analysis of local assessment administration may best be made by distinguishing three general classes of localities: (1) The larger cities; (2) the smaller cities; (3) the rural areas. Generally speaking, the greatest advances in assessing methods have been made in the larger cities. Some of the smaller cities have adopted and adapted these methods to their own needs. Thus far very little progress has been made in rural assessing methods, although there are certain exceptions, notably in Wisconsin and Minnesota, where better techniques have been introduced by the state tax commissions.

The Development of Technical Methods of Urban Assessments

EARLY ORIGINS.—The earliest origins of technical urban assessment methods were, like folk songs, of indefinite authorship. The beginnings probably consisted in the construction of real estate value rules founded on the practical experience of men familiar with the real estate business. The next step was the promulgation of these rules by persons in authority. For example, Judge Murray Hoffman declared in 1866, in a case before him, that the first half of a lot 100 feet deep contained two-thirds of its value. This judgment was later elaborated into a rule covering other fractional portions of a lot by Henry Harmon Neill, Real Estate Editor of the *New York Evening Mail*. Toward the end of the nineteenth century, the basic concept of modern technical assessment, namely, comparable average value units, together with rules for computation for important classes of deviations, and methods of application to specific properties, had been established in the better assessing offices of the country. However, the practical application of the concept was very crude at this time¹

THE ST. PAUL ASSESSMENT OF 1896.—An important impetus to the improvement of assessing technique occurred in 1896. In that year, the city of St. Paul was reassessed under the direction of Mr. William A. Somers. Mr. Somers had been City Engineer and later Deputy Assessor of St. Paul. During the early nineties, he had worked upon the problem of comparative valuation, and, amongst other things, had made diagrams and charts for the computation of values of corner properties. He had also attempted to refine the rules for lots of abnormal depth, having constructed separate percentage value tables for retail, wholesale and resi-

¹ The writer is indebted to Mr. Lawson Purdy, formerly President of the Department of Taxes and Assessments of the City of New York for information on the early origins of technical assessing methods.

dential types. He had attempted to interest the populace and the officials of the city in his methods, but with little success. The city officials were quite contented with their system of assessment, wherein the valuations were merely copied from year to year. However, by 1893, the assessment rolls had become glaringly inequitable. The depression of that year had affected land values very extensively, and most unevenly, throughout the city. Moreover, a decided and sudden shifting of the retail business district had left much of the property formerly valued as the highest in the city, almost deserted. Under such circumstances, Mr. Somers was able to command attention. He was finally asked to direct a reassessment in 1896.²

The methods employed in the assessment of that year were interesting:

"For the field work, eighty-two men were employed; the city was divided into 263 districts; each man was provided with a supply of blanks, a five-foot measuring pole, a large scale map of the district assigned to him, and the descriptions of all the parcels of land in the district as found in the office of the register of deeds. With the land itself the inspector so equipped had little to do—chiefly to notice the nature of the street improvements in front of it, and the grade of the lots with reference to the street. For recording information about buildings three kinds of blanks were provided; one for residences, one for stores with living rooms or halls overhead, and one for large stores, factories, warehouses or office buildings. . . . The field work was completed, except for a few cases where the reports were defective, in exactly five weeks.

"While the field work was still in progress, a small committee of architects, employed for the purpose, went to work on the material thus collected and began the valuation of the buildings. The committee soon settled on a few simple rules and tables. Small, and medium sized, buildings were valued at so much per square foot of ground covered. For plain wooden dwellings, the following table was used.

	<i>No foundation</i>	<i>Stone or brick foundation</i>
One story	\$0.60	\$0.90
One story and a half . . . . .	.80	1.10
Two stories . . . . .	.90	1.20

"Ten cents per square foot was deducted if there was no provision for water; the same amount if a building without a foundation was over ten years old, or if a building with a foundation had no cellar or a small one. An addition of twenty cents was made for a furnace, twenty-five cents for a bath room, and ten to twenty cents for hardwood finish. For large modern houses

² Data from F. R. Clow, "The St. Paul Method of Assessing Real Estate," *Journal of Political Economy*, Vol. 5, No. 1, December 1896, pp. 71-72.

another table was provided, and still another for barns. These tables were found to work with tolerable accuracy up to \$7,000. For buildings above that figure, personal inspection by the architects was necessary, or else information on the original cost.

"At the request of the assessor the Chamber of Commerce appointed a committee of nine citizens to co-operate with him in valuing the land. This committee of nine called to its aid twelve other citizens, making a committee of twenty-one of the leading business men and real estate dealers of the city. These gentlemen, serving gratuitously, decided on the commercial value of the middle lot of each side of each block in the city. For the preliminary work the committee divided itself into subcommittees; each subcommittee considered a small section of the city, writing the figures arrived at on a large scale map of its section. When the work of the subcommittee was done, the maps were all mounted together on one side of a room in the courthouse, making a huge map of the city with the preliminary estimate written about every block. Then the committee of twenty-one met and considered the map as a whole, in order to bring the various estimates into harmony with each other and to give the completed work the authority of the entire committee."³

Unit front values having been established by this consensus of community opinion, the depth rules and corner rules were applied in the assessing office and the assessments for both land and improvements completed.

DEVELOPMENT AND SPREAD OF THE UNIT VALUE SYSTEM.—In the St. Paul assessment of 1896, various refinements were made in the unit value system, and the principle of active public participation was a new feature. But the most important contribution of this experience was the stimulus to assessment reform which the publicity it had received caused in other cities. Mr Somers was soon called in to assist in various cities which were interested in improving their assessment methods. Amongst the early ones were New York, Cleveland and Chicago.⁴

Assessment technique was further advanced by the assessment administrators in some of these cities. For example, Mr. Lawson Purdy, for many years President of the Department of Taxes and Assessments of New York City, was the first to distribute land value maps to the public for criticism and suggestion. In St. Paul, as has already been described, real estate men had been brought together in a large room, on a wall of which a map had been hung up. These men had then given their opinions on values, and by this means the assessor had been guided in the establishment of his unit values. The system had worked out

³ Clow, *op. cit.*, pp. 72-74.

⁴ For a description of the activities of Mr. Somers with respect to assessment reform in these and other cities, see W. W. Pollock and K. W. H. Scholz, *The Science and Practice of Urban Land Valuation. An Exposition of the Somers Unit System*, 1926, pp. 176-181.

very well, but such an arrangement was impracticable in a city of the size of New York. It would have taken a long time to get agreement for the whole city and before the final sections could have been completed, the valuations for the early sections would have required changes (because of changes in values). Mr. Purdy hit upon the idea of having the deputy tax commissioners prepare the front foot land values, issue these values in the form of a volume of maps, and distribute them widely amongst well-informed persons for criticism. These maps first appeared in 1909. Many cities have since prepared similar maps.

Mr. John A. Zangerle, who is sort of the dean of present assessment administrators, was on the board of assessors which retained Mr. Somers to assist in the assessment of Cleveland in 1910. Two years later, he was elected county auditor (ex officio assessor in Ohio), and he has continued in office since that time. He has made many contributions to assessing technique, developing and refining methods of computing values for lots of abnormal depth, methods of evaluating corner influence, and methods of building valuation.

All of these men were active in establishing modern assessing systems in other cities. Mr. Somers and others organized a commercial appraisal firm which has installed the system in a large number of cities.⁵ Mr. Purdy's contributions towards the spread of modern assessing methods were of the most distinguished sort. As President of the Department of Taxes and Assessments of New York City, this metropolis came to have the reputation of being one of the best-assessed cities in the country. Requests for advice and guidance from other cities were very frequent. And Mr. Purdy rendered a great deal of useful service by his vigorous recommendations in favor of the unit value system, and by his advice on specific methods and procedures. In addition to these activities, Mr. Purdy actively sponsored the adoption of the unit value system at addresses before conferences of public and quasi-public officials and by pamphlets on the subject.⁶ Mr. Zangerle has written a treatise on the subject as well as many articles, and has also personally assisted in installing the system in other municipalities.⁷ Through the efforts of these men, and others such

⁵ Pollock and Scholz, *op. cit.*, chap. xx.

⁶ The best known of these is "The Assessment of Real Estate," National Municipal League, *Technical Pamphlet No. 1*, which has gone through four editions. Amongst the addresses are "City Real Estate Assessment," *Proceedings of the National Tax Association*, 1908, pp. 237-247; "The Assessment of Property for Taxation," *Publications of the American Economic Association*, Third Series, Vol. XL, 1910, pp. 360-365; "The Assessment of Real Estate," *Proceedings of the State Conference for Education in the South*, held at Richmond, Virginia, April 15-18, 1913, pp. 182-184.

⁷ John A. Zangerle, *Principles of Real Estate Appraising*; 1st ed., 1924; 2nd ed., 1927. Amongst the articles: "Real Estate Assessments in Cities," *Proceedings of the National Tax Association*, 1923, pp. 46-63; "Modern Tax Assessing and Collecting Administration," *Bulletin of the National Tax Association*, June 1926, pp. 275-281.

as Mr. Arthur C. Pleydell, who was instrumental in bringing about the adoption of technical methods in New Jersey, a movement was initiated toward the replacement of the system of "general familiarity" by the system of "unit valuation." This movement got well under way in the early twentieth century, and is still going on now. The newer modern method has not entirely superseded the old by any means as yet, and there is still room for further development and refinement of the system of unit valuation, but a good deal of progress has been made, especially in the larger cities of the country.

Modern Urban Assessing Techniques

Modern systems of assessment include four basic components: (1) tax maps; (2) a system of unit valuation for land; (3) a system of unit valuation for buildings; (4) a system of compiling and analyzing indices of value. Each of these components will be briefly discussed before describing the extent of their actual utilization.

TAX MAPS.—Accurate and detailed tax maps constitute *the* basic prerequisite to any attempt at systematic assessing. For without a definite and accurate knowledge of physical dimensions, unit valuation is entirely out of the question. These maps usually contain the following detail: An outline of the blocks and lots within each block, drawn to scale, figures indicating length in feet and fractions of feet of each line bounding any lot; an identifying number for each block and an additional identifying number for each lot, and the names of the streets bounding the block. In addition, some tax maps also indicate street widths, the street number assigned to lots, and water courses or other unusual topographical features. In a relatively small number of cases, public improvements and public utilities are also shown.

In the best tax maps, every block in the city is given a number, and all the lots in each block are numbered consecutively beginning with one, number one always being on a certain corner of the block. By this means, a designation such as block 1500, lot 14 can refer to only one parcel of land in a city. This system provides a good basis for indexing all assessment and tax data in the assessing and collecting office.

The *scale* of tax maps depends primarily on the degree of intensity of land utilization of the area. In developed urban districts, the most convenient scales have been found to be forty, fifty or sixty feet to the inch. These maps are broken up into plates of convenient size, ranging from as small as $12\frac{1}{4} \times 8\frac{1}{2}$ inches to as large as 24×36 inches. They are then put together in book form. Each plate is assigned a number, and bears on the proper margin the number of the plate on which neighboring areas are to be found. They are then bound into volumes, each volume containing in convenient geographical order the plates

covering some specified section of the city. At first, the general practice was to bind them in permanent volumes. Loose-leaf binders have been found to be more convenient, however, and are now becoming more prevalent.⁸

UNIT VALUATION: LAND.—The basic method of modern assessing system is to break down the value of properties into small, comparable value units. For standard, "average" parcels, the application of the method is quite simple. With respect to land valuation, the usual practice is to consider a strip of land, located at or near the middle of a block, with a frontage of 1 foot and a depth of 100, 120, 125, 140 or 150 feet (depending upon the normal lot depth of the area), as the standard physical unit. The various blocks of a city are assigned front foot values, derived from analysis of sales and other value data. The value of inside lots of normal depth and regular shape is the product of the front foot unit value times the frontage.

Abnormal Depth.—In the case of lots of abnormal depth, the computation is a little more complex. Since the front portion of a lot is more valuable than the rear portion, it would be inaccurate to make a simple arithmetic calculation of area for lots of greater or less than normal depth. Depth tables have been constructed for the computation of such values. Generally, cities have either adopted or made minor modifications in the tables prepared by the pioneers in the field. A compilation of tables now in use in various cities of the country has been made by Elbert A. Young, County Assessor of St. Paul, Minnesota. It is shown in Table LXXXVII.

⁸ For further data, see A. E. Buck, *Municipal Finance*, 1926, pp. 329-336. The above discussion of tax maps is based largely on chap. xi of this volume entitled "Assessment of Property for Taxation," written by Philip H. Cornick.

TABLE LXXXVII

DEPTH TABLES USED IN CITIES OF THE UNITED STATES^a

Depth, in feet	Martin	Davis	Harper-Edgar Washington Mo. St. Rochester, N. Y.	McMichael- Bingham	Crugen	Pleydell	Hoffman-Neill Providence	Murray-Hoffman	Somers Seattle Cleveland Portland San Francisco	Somers Rensselaer Detroit	Lansday-Bernard
5	15	12 6	22 4	15 3	9 4	..	17.	..	14 4	13 1	10.3
10	16 9	21 7	21 4	25 1	17 8	..	20	16	25	23 5	17.
15	24 2	20 2	28 3	30 4	25 6	..	33	23 5	33 2	32 6	23 8
20	28 6	24 5	33 3	44 7	33	..	39	31	41	40 5	30 6
25	34 4	41 7	50	42 7	40	45.	44	37 5	47 9	47 5	37 5
30	39	47 1	54 8	48 3	46 7	..	49	44	54	53 7	43 7
35	43	52 1	59	53 2	53 1	..	54	50	59 2	59 3	50
40	48 4	56 8	63 3	58 1	59 1	..	58	56	64	64 2	55 7
45	53	61	67 1	63	64 7	..	63	61	68 6	68 6	61.4
50	57 5	66 4	70 1	67.	70	68.	67	67	72 5	72 5	66 5
55	62	73 4	74 2	72 5	74 9	..	71	71 5	76 1	76 1	71 6
60	66 4	77 1	77 5	75	79 4	..	74	79	79 4	79 4	76 1
65	70 8	80 6	80 6	82 2	83 4	..	78	80	82 6	82 5	80 5
70	75 1	84 1	83 6	85 6	86	..	81	84	85 4	85 4	84.
75	78 4	87 6	89 4	88 8	89 9	87	84	87 5	88 3	88 2	87 4
80	83 6	91	91 9	91 9	92 2	..	88	91	90 9	90 9	90 4
85	87 8	94	92 2	94 6	94 2	..	91	93 5	93 3	93 3	93 2
90	91 9	97	97 5	98 1	98 1	..	94	96	95 6	95 6	95.7
95	96	100	100.	100.	100	100	97	98	97 9	97 9	98.
100	100	103.	102 5	100.	101 9	100	100.	100	100	100	100
105	104	106.	104 9	105 3	103 8	..	..	..	102 1	102 1	102
110	107 9	108 7	107 2	107 2	105 0	..	..	..	104.	104	103.5
115	111 8	111 2	109 5	110 2	107 4	..	..	..	105 8	105 8	105
120	115 6	113 7	111 8	112 6	109	112	..	..	107 5	107 5	106 5
125	119 4	116 2	116 2	116 2	113	..	..	..	109 1	109 1	108
130	123 1	118 7	118 2	118 3	113	..	..	..	110 5	110 5	109.1
135	126 8	121 2	122 5	122 5	115 4	116	118	..	111 8	111 8	110 2
140	130 4	123 7	124 5	124 5	119 4	..	..	..	113.	113.	111 5
145	134	128 7	128 4	128 4	121 8	..	..	..	114 1	114 1	112 8
150	137 5	131 2	132 3	132 3	122 6	..	..	..	115	115	113 8
155	141	136 2	136 2	136 2	122 6	..	..	..	116	116	..
160	144 4	138 7	138 7	138 7	122 6	..	..	..	116 8	116 8	..
165	147 8	141 2	141 2	141 2	122 6	..	..	..	117 6	117 6	..
170	151 1	143 2	143 2	143 2	122 6	..	..	..	118 4	118 4	..
175	154 4	145 2	145 2	145 2	122 6	..	..	..	119 1	119 1	117.
180	157 6	147 2	147 2	147 2	122 6	..	..	..	120 4	120 4	..
185	160 8	149 2	149 2	149 2	122 6	..	..	..	121	121	..
190	163 9	151 1	151 1	151 1	122 6	..	..	..	121 5	121 5	..
195	167	153 1	153 1	153 1	122 6	..	..	..	122.	122	119
200	170	155 1	155 1	155 1	122 6	..	..	..	..	..	..

^a Compiled by Elbert A. Young, County Assessor, St. Paul, Minnesota. From Report of Assessor, St. Paul, Minnesota, 1930, p. 6

TABLE LXXXVII

DEPTH TABLES USED IN CITIES OF THE UNITED STATES^a
(Continued)

Chicago	Newark	Toledo	Philadelphia	Buffalo Milwaukee	Cincinnati	DENVER		Los Angeles	Pittsburgh	St. Paul	Average
						High Class Retail	Ordinary Retail				
15 5	15.	22 5	17 3	17	13.	20 8	16 1	10 3	.	13	15 8
20 3	25	28 5	24	28	22 9	31 4	26 0	17	.	21	23 8
26.1	33 5	38 5	33	37.	31 4	40	34 9	23 8	.	20.	31 5
31 2	42.	44 5	39	44.	38 7	47 4	42 3	30 6	.	20.	37.5
36 3	50	54 5	44 4	40.	45	53 0	48 9	37 5	.	20.	44 1
41 2	58	54 5	44 5	54.	50 9	59 2	54 9	43 9	51 4	49	49
40 1	63	59	44 1	50.	56	62 4	60 3	50.	56 6	55.	55
50 8	68	63	58 5	63	61 5	68 8	65 2	55 8	61 4	60.	60
55 5	71 5	67	62 7	67	66 2	73	69 6	61 4	66	65	65 6
60.	75.	70 5	66 7	70	70 6	76 8	73 6	66 5	70	70	68 6
64.5	77 5	74	70 5	74.	74 7	80 2	77 2	70 5	74	74.	72 8
68.8	80.	77 5	74 2	77	78 5	83 3	80 5	74 2	77 8	78	76 5
73 1	82	80	77 7	80	82	86 1	83 5	77 7	81 2	81	80.
77 2	85.	83 5	81 2	84.	85 3	88 6	86 3	81 2	84 4	84	83.3
81 3	87.5	86	84 5	87.	88 2	90 9	88 9	84 5	87 5	87.	86
85 2	90.	89	87 7	90	91	93	91 3	87 7	90 3	90.	89
89 1	92.5	92 5	90 9	93	93 6	94 9	93 6	90 9	93	93	92.3
92 8	95	95	94	95	95 9	96 7	95 8	94	95 5	96	94 9
96.5	97 5	97.5	97	98.	98 1	98 4	97 9	97.	97.8	98	97 5
100	100	100	100.	100	100	100.	100.	100	100.	100	100
103 5	102.	102 5	.	102	101 8	101 5	101 9	102 5	101 9	102	102.3
106 8	104.	105.	.	103.	103 5	102 9	103 7	104 5	103 8	104	104 5
110.1	108	107.5	.	105.	105.1	104 2	105 3	106 4	105 5	106.	106 5
113 2	108.	110	100	107.	106 6	105 4	106 9	108.1	107 3	108	108 6
116 3	110.	112.	.	109.	108 1	106 5	108 3	109 5	109	110.	110 5
119 2	112	114.	.	110	109 5	107 5	109 6	111.1	110 8	111 5	112 3
122.1	114	115 5	.	112.	110 8	108 4	110 8	112 5	112 4	113.	114
124 9	116.	117	...	113	112 1	109 2	111 9	114 1	114	114 5	115 7
127 5	118.	118 5	...	114.	113 4	109 9	112 9	115 5	115 5	116	117 4
130.	120.	120	117.	115	114 6	110 5	113 8	117.	117	117 5	119
132 5	122	121 5	...	116	115 7	111 1	114 7	118 4	118 5	119.	120.8
134 8	124	123	...	117.	116.8	111 6	115 5	119 8	120	120 5	122.4
137 1	125 5	124	...	118	117 9	112 1	116 2	121 1	121 4	122	123 9
139 2	127	125	...	118	118 9	112 6	116 9	122.4	122.8	123.5	125 0
141 3	128	126.	124	119	119 7	113 1	117 5	123 7	124.	125.	125.8
143 2	129	127.	...	120	120 4	113 5	118 1	124 8	125 3	126	127.8
145	130	128	...	120.	121	113 9	118 7	125.	126 5	127.	128 9
146 0	131	129	.....	121	121 4	114 3	119 6	127.	127 8	128	130 1
148.4	132	129 5	.	122.	121 8	114 7	119 6	128.	128 9	129.	131.2
150	133	130.	130.	122.	122.	115.	120	129	130	130	131.3

^a Compiled by Elbert A. Young, County Assessor, St. Paul, Minnesota. From *Report of Assessor, St. Paul, Minnesota, 1930*, p. 6.

There are differences as amongst the various rules as to how much more valuable is the front portion of a lot, but these differences are not very great. For example, 19 of the 22 rules consider the first half of a lot as worth between 65 and 75 per cent of the total value of the lot. Again, 19 of the rules valued the first three-fourths of a lot at between 80 and 90 per cent of the total value of the lot; 14 at between 85 and 90 per cent. These are high concentrations between narrow class limits.

Of all the rules, the Somers rule in the form which it took in Cleveland is probably used in a larger number of cities than any others.⁹

The modern tendency is to substitute a number of rules for the single rule, a refinement which results in greater accuracy. For example, in Buffalo, Cambridge, Cincinnati, Milwaukee, Newark, and other cities different tables are used for residential as contrasted with commercial districts. In some cases, no table at all is employed for residential properties. Again, wholesale commercial districts often receive differential treatment. Industrial and factory sites are usually valued on a square foot basis. In some cities high class retail is distinguished from ordinary retail.¹⁰

Corner Influence.—It is usually recognized that corner lots are more valuable than inside lots. Practice with respect to computation of corner properties has not as yet been standardized.

In the first place, there are differences of opinion as to how far corner influence extends. In Baltimore, Fort Worth, Minneapolis, Springfield, St. Louis, Houston, Denver, Cleveland, St. Paul (business), Chicago, Rochester and Cambridge, it is assumed (ordinarily) that 100 feet of the main street frontage is affected by the adjacent side street. In Detroit, only the 60 feet nearest the corner are deemed to have "corner influence" value; in Bridgeport and St. Paul (wholesale), 50 feet; in Jacksonville, 52½ feet; in Milwaukee, 40 feet; in Buffalo, 30 feet; in New York, Jersey City and Newark, 25 feet.¹¹ Moreover, there are many variations from these "norms" in actual practice, *within* any of these cities.¹²

Secondly, there is divergence as to basic methods of computation. In Newark and New Rochelle, the unit value of the corner lot is increased by percentages of the unit value of the main street, disregarding the character of the side street. A more widely used type of corner rule is that which takes into account the value of the units of the less important street. This may be accomplished by having the percentage of increase for corner influence vary

⁹ Cornick, *loc. cit.*, footnote §. For an interesting discussion of methods of constructing these rules, see W. I. King, *The Valuation of Urban Realty for Purposes of Taxation*. Bulletin of the University of Wisconsin No. 689; Economic and Political Science Series, Vol. 8, No. 2, 1914, chap. iv.

¹⁰ Data from Cornick, *loc. cit.*, p. 346, and *Report of Assessor, St. Paul, Minnesota*, 1930, p. 6.

¹¹ W. L. Prouty, C. W. Collins and F. H. Prouty, *Appraisers and Assessors Manual*, 1930, p. 319.

¹² Lawson Purdy, Personal Interview with the writer, July 29, 1935.

according to the ratio between the respective unit values of the main and side streets. A third type of rule arrives at the value of a corner lot by considering it as two lots, one fronting on the main street, the other on the side street (the frontage on the main street lot being considered in the latter case as the depth). Thus, the depth table would be applied to the unit value of the main street (the lot being considered as fronting on the main street); the depth table applied to the unit value of the side street (the lot being considered as fronting on the side street); each multiplied by their respective frontages; and the results summated to give the total value of the corner lot. This rule was deemed by its author, Mr. A. D. Bernard of Baltimore, to be applicable to only high class retail sections. Mr. John A. Zangerle has extended the method to cover corner properties in less valuable sections, by adding less than the total value of the side street frontage lot, where the unit value of the main street is less than \$200. The less valuable the main street unit value, the less is added for corner influence. In addition, in all cases, a special depth curve is used for computing the value of the side street lot, which yields lower values than the regular depth curve.¹³

Irregular Lots.—Thus far we have considered the application of the unit valuation system to lots of regular shape, *i. e.*, either square or rectangular. Often, however, lots have more or less than four sides, and/or sides which are not parallel to each other. Ordinarily, the method of valuing such lots is to divide them into two or more parts which will be either rectangles or triangles. The rectangles offer no special difficulties. The triangles are correctly evaluated, by summing the percentages of unit value that would be assigned by the depth curve to successive strips one foot wide. Charts may be constructed for facilitating this computation.¹⁴

Alley-Influence.—Where alleys exist, such must be taken into account. They vary in their effect upon value. In some instances, alleys have taken on the characteristics of minor streets, endowing the adjacent buildings with such advantages as better light and air, and additional display space. In other cases, alleys have become little short of public nuisances, and are a detriment rather than an advantage to the lots which abut on them. Most commonly, they are deemed to add value, especially in business districts. The usual practice in assessing is to add a fraction of the alley's width or a specified number of feet, either to the frontage or the depth

¹³ Cornick, *loc. cit.*, pp. 358-362. The value for 100 feet is 72.9 per cent in the Zangerle depth curve. For further detail on the Zangerle method of computing corner values, see J. A. Zangerle, *Principles of Real Estate Appraising*, 1927, chap. 10. Professor Luther Gulick has informed the writer that Mr. Arthur C. Pleydell was the first to formulate the concept of taking the value of the side street into account in computing the value of corner lots.

¹⁴ Cornick, *loc. cit.*, pp. 363-364. For further detail, see J. A. Zangerle, *Principles of Real Estate Appraising*, 1927, chap. 12, and by the same author, *The Principles of Land and Building Appraisals as Scientifically Applied in Cuyahoga County*, 1931-1932, p. 9.

of abutting lots. Thus, in Cleveland, one-half of the width of the alley is added to the depth in the case of business lots (no additions are made in residential districts). In Milwaukee, three feet is added to the depth in residential districts and five feet in business districts. In Jersey City and Rochester, two-thirds of the width of the alley is added to the depth of the lot.¹⁵

Double-Frontage Lots.—It frequently happens that a lot has a frontage on two parallel streets. The most common method of dealing with such a situation is to find what is known as the "merge point," *i. e.*, the point in the parcel at which a square foot has the same value when calculated from either frontage. The lot is divided at that point and is valued as if it were two lots. Where each frontage of the lot is improved separately and more or less uniformly with the adjoining frontages, it is often better to divide the lot along the line at which the adjoining lots are divided.¹⁶

Other Factors.—In addition to the situations which have been discussed above, and for which fairly well standardized rules have been established, there are a number of other situations which have received more discretionary treatment. One such factor is grade. Sometimes lots which are above or below grade may be worth more than lots in the vicinity which are on grade, as for instance where either dumping space or material for fill is in demand. In some cases, the cost of raising or lowering the lot will actually amount to more than the value of lots which are already in grade. (Such lots still have a sales value if anticipated increases in value are deemed to exceed anticipated costs of raising or lowering the lot, and such is usually the case.) Ordinarily off-grade lots are worth less than other lots. No standardized practice is generally used, however.¹⁷

Plottage is another factor which is generally handled with discretion rather than by standardized rules. In sections which are changing rapidly from a lower to a higher utility, an assembled plot 100 x 100 will bring more in the market than four lots, 25 x 100. For the task of assembling involves delay and risk, and where large plots are in demand the costs of assemblage must be included.

Conversely, where a lot is too small for an improvement appropriate to the character of a section, its market value per front foot is less than that of adjoining land. In such cases, a deduction

¹⁵ Cornick, *loc. cit.*, pp. 304-305, and Prouty, Collins and Prouty, *op. cit.*, pp. 229-230.

¹⁶ Cornick, *loc. cit.*, pp. 305-306.

¹⁷ In Cincinnati, tables are employed in which six classes are designated, percentage decrease in value being made to vary with the degree of abnormality. Cornick, *loc. cit.*, pp. 366-367.

should be made therefore from the ordinary unit value computation.¹⁸

UNIT VALUATION: BUILDINGS—There is much more variety of practice in the application of the method of unit valuation to buildings than in the case of lands. Sometimes the basic physical unit is square foot of floor space; sometimes cubic foot of contents; sometimes square feet of area covered. Again, there is a conspicuous absence of standardization in the building classifications used. The basic method of applying the unit valuation system to buildings consists in the establishment of unit factors of value. The buildings of a city are classified by type, *e.g.*, single residence; double residence; apartment house; store building; office building, etc. Value units, varied according to kind and quality of construction, are established for each type. The computation of building value is then a matter of summation of these value units, taking into account such factors as features (roof, cellar or basement, heating system, etc.), depreciation and obsolescence. The tables of factors of value vary widely. In Minneapolis, 21 classifications are used; in Los Angeles, 24; in Milwaukee, 30, in Jersey City, 39; in Rochester, 46; in New York City and Duluth, 48; in Cleveland and Portland (Ore.), 53; in Cincinnati, 57; in Denver, 88; in St. Paul, 96.¹⁹ There are also wide differences in the *values* assigned throughout the country to fairly comparable unit value factors.²⁰

Again, considerable divergence exists with respect to methods of taking depreciation and obsolescence into account. The former is often a discretionary matter, although standardized depreciation tables have been established and are being used in some of the cities which have made the most advance in the improvement of modern assessing methods.²¹ As for obsolescence, this factor has been entirely a matter of discretion. However, it may be that a certain amount of standardized practice may be some day established.²²

VALUE DATA.—It is possible for a city to adopt many of the components of unit valuation (*e.g.*, standard depth tables, corner formulae, and factors of value for building valuation), and then allow the system to stagnate by failing to keep the unit values

¹⁸ *Ibid.*, pp. 367-369. See also the discussion in Purdy's "Assessment of Real Estate," *loc. cit.* Plottage is generally a more important factor in eastern cities, where lots in the business section are often found to be 20 or 25 feet wide and 100 feet deep. In western cities, where the lots are generally larger, frequently 50 feet by 150 feet, the factor of plottage is not often involved. Zangerle, *Principles*, p. 44.

¹⁹ Prouty, Collins and Prouty, *op. cit.*, p. 46.

²⁰ Cornick, *loc. cit.*, p. 373.

²¹ For further detail, see Zangerle, *Principles*, chap. xxvii and Prouty, Collins and Prouty, *op. cit.*, chap. vi.

²² See Prouty, Collins and Prouty, *op. cit.*, chap. vii for an attempt in this direction, and John E. Burton, "Building Obsolescence and the Assessor," *Journal of Land and Public Utility Economics*, May 1933, p. 109 *et. seq.* for a criticism thereof.

up-to-date. This can be avoided by the continued collection, compilation and analysis of indices of value, such as sales, mortgages, appraisals of estates, etc. The method of the unit value system of assessment is a combination of analysis and synthesis. Available indices of value serve as representative samples to be broken down into value units applicable to all of the properties of a city. The larger and more representative the sample, the more easy is the task of establishing currently valid units, and the more justifiable will the assessments calculated thereupon be.

SUMMARY.—RECORD SYSTEMS.—These four components, tax maps, standard methods of applying unit values to land, standard methods of applying unit values to buildings, and the continuous revision of unit values by the analysis of current value data constitute the essential framework of modern assessing systems. Their utilization is often connected together by the employment of card or loose leaf record systems. The best forms used provide space for the following information: name and address of owner; block and lot number and the dimensions of the lot; the position of the lot with reference to intersecting streets, the alleys, and to the street grade; the size, type of construction, use and ground plan of the building; its date of construction, if ascertainable; the public improvements and public utilities available to the property, and if the city is zoned—the height, area and use zones in which the property lies. In order to reduce routing clerical labor to a minimum, the forms allow detailed descriptions of the architectural features of the building by means of check marks placed opposite the proper items on columnar lists of such features. Insertion of a ground plan is facilitated by providing a cross sectional space. Spaces are also provided for insertion of information relative to changes in ownership and in unit or total values for land and buildings. The back of the form is used for the entry of supporting data on values, sales, mortgages, leases, rentals, fire insurance policies, bid and asked prices, contract costs of construction, and/or any other available indices of value²⁸

A notable refinement in these cards in recent years has been the differentiation of these cards by class of buildings. For example, in Los Angeles, buildings are classified under four main heads: Class A, B, C and D. Class A consists of fireproof, steel frame or reinforced concrete frame buildings; class B of buildings having a skeleton frame of steel or reinforced concrete and wooden interiors (wood joists and studs); class C consists of brick, concrete and masonry outer walls with interior of wood (wood studs and joists), class D of frame, stucco or brick veneer. Different forms are used for each class the cards varying in color and the nature and extent of the detail. In Wisconsin, the classification is made along different lines, namely, according to

²⁸ Cornick, *loc. cit.*, pp 337-340. In many cities, there is very little space allotted to land value data, and in practically all cities, the forms devote most of the space to the building.

whether the properties are residential, mercantile or manufacturing. The residential card is yellow; the mercantile card, white; the manufacturing form, blue. With respect to the residential and mercantile cards, one side is devoted entirely to data on the building; the other side to general identification, sales and rental information, land value computation and summation. The "Manufacturing Data Card" is really a six-page form, calling for a mass of information on sales, rentals, appraisals, location, plan of plant, structural data, transportation facilities, labor supply, efficiency of plant-layout and similar items. The forms prescribed by the Wisconsin Tax Commission are shown on pp. 269-278.

RESIDENTIAL APPRAISAL CARD CITY OF

DESCRIPTION				OWNER-TENANT					
Sub or Addn--		Ward		Street and Number					
Description		Lot Block		Owner					
		Lot Block		Owner's Address					
				Taxable					
				Address					
SALES INFORMATION				RENTAL INFORMATION					
COMPARATIVE				COMPARATIVE					
Year	No of Sales	Total Consideration	Average Sd's Price	No.	Year	Full Rental Val.	Vacancy Factor	Adj. Rental Val.	Aver. %
19		\$	\$	19		\$	\$	\$	%
				19					
				19					
THIS PROPERTY				THIS PROPERTY					
Date	Consideration	Volume	Page	Remarks	Year	Full Rental Val.	Vacancy Factor	Adj. Rental Val.	% Yr. Average
					19	\$	\$	\$	
					19				
					19				
Sales Value Trend: Up Down Constant				Rental Value Trend: Up Down Constant					
GENERAL INFORMATION				LAND MAP					
Appraisal--Date Am L. \$ By				Indicate Direction 1 Division					
Appraisal--Date Am L. By									
Asking Price \$ Offer									
Owner's Estimate Land		Bidder	Equip.					Total	
Dist Value Book Land		Bidder	Equip.					Total	
Deprec. Value Book Land		Bidder	Equip.					Total	
Bldg Permit Date Am L. Original Cost Date Amt									
LAND VALUE FACTORS				COMPUTATION OF LAND VALUE					
Width		Surface		Width					
Average Depth		Grade		Front Feet Unit		\$			
Facing on		Pavement		Value Full Depth		\$			
Corner		Sidewalk		Depth Factor %					
Exposure N S E W		Curb and Gutter		Unadjusted Land Value		\$			
Alley Side Rear		Water		Adjustments					
Distance Front		Sewer		Alley Influence					
Center of City		Gas		Corner Influence					
Car or Bus Lane		Electricity							
Grade School		Cement Drives and Walks							
High school		Pavement							
Church		Shrubs, Trees and Lawn							
Zones									
Neighborhood		Total \$		Total Land Value		\$			
SUMMATION OF VALUATION PROCESSES				Remarks					
	Comparative Sales Value	Capitalization of Rental Value Rent Rate	Sound Value					General Information	
Land	\$	\$	\$						
Improvements									
Total									
Characteristics									
ASSESSMENT SUMMARY									
By Whom Assessed									
Date									
Land									
Improvements									
Total									

FORM A. APPRAISAL CARD USED FOR ASSESSING RESIDENTIAL PROPERTY IN
WISCONSIN (YELLOW)

MERCANTILE APPRAISAL CARD---BUILDINGS

BUILDING VALUE FACTORS													
Main Part	Projections	Class	Use	STORIES									Total
				Basement	1	2	3	4	5	6	7	8	
Store			Fixed Type										
Store and Office			" Load Cap										
Store and Flat			10										
Public Garage			10										
Public Station			10										
Warehouse			10										
Garage			10										
Truck			10										
Club													
Hotel													
Dance Hall			Average % of vacancy										
			Rental value trend Up -- Down --										
Dimensions													
Length													
Width													
Garage Rent													
Type			Interior Trim		Extras and Special Equipment								Sound Value
Ordinary			Hardwood		Special Paints								
Mill			Softwood		Sprinkler System								
Roof and Gable			Plaster		Forced Ventilation								
Asphalt			Brick		Refrigeration								
Foundation			Interior Walls		Elevators								
Block			Plaster		Lighting and Electric S. & M.								
Brick			Concrete		Fire Escapes								
Asphalt			Block										
Foundation			Plaster										
Block			Ceiling		Year Built								Cost \$
Asphalt			Plaster		General Condition								Good Medium Fair Poor
Foundation			Block										
Block			Heating		STRUCTURAL VALUE COMPUTATION								
Asphalt			Hot Air		Length in Feet								
Foundation			Hot Water		Width in Feet								
Block			Steam		No. of Sq. Feet								0 Unit of \$ a \$
Asphalt			Water		Average Height								0 Unit of \$ b \$
Foundation			Oil		Total Cubic Feet								
Block			Cool		Present cost reproduction a' or b'								\$
Asphalt					Additional for Extra								\$
Foundation					Total reproduction Cost								\$
Block					% Deduction								%
Asphalt					Grand Value								\$
Foundation													
Block													
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[illegible]

FORM C APPRAISAL FORM USED FOR ASSESSING INDUSTRIAL PROPERTY IN
WISCONSIN (BLUD).

Name of Plant

MANUFACTURING DATA CARD

Sheet No. 2

SCHEDULE "D"

SITE DATA

Area	No. of Acres	No. Lots	Front Ft.	Sq. Ft.								
	Amount in Use		Room for Expansion									
Location	Advantage											
	Disadvantage											
Character of Subsoil	Rock		Quicksand									
	Other											
	Advantage or Disadvantage											
Topography	Normal		Abnormally High	Abnormally Low								
	Advantage or Disadvantage											
Natural Facilities	Water	Power	Manufacturing Processes									
	Other	Waste Disposal	Drainage									
Exposure Direction (See Map)	Orientation											
	Other											
Improvements Municipal Utility	Present	Water	Sewer	Gas	Elec.	Pavement	Fire Protection	Zoning	Bldg. Restrictions	Bus	Street Car	Railroad
	Available											
Character of Surrounding Land	Vacant		Used		Unit	Value per Unit						
Similar Site Availability Ground and Yard												
Natural Level												
On Fill	Improvements		Age	Reproduction Cost	% Condition	Present Value						
		Side Track	Lin. Ft.									
On Trestle	Fencing	Lin. Ft.										
	Drives	Sq. Yds.										
In Cut	Grading	Cu. Yds.										
	Excavation	Cu. Yds.										
	Other											
Site Value Computation per Schedule "D"												
Amount of Land:	Acres	Sq. Ft.	Lots	Frontage								
				@	per Unit	\$						
				Additions for Ground Imp.	\$							
				Total Site Value	\$							

FORM C (CONTINUED). APPRAISAL FORM USED FOR ASSESSING INDUSTRIAL PROPERTY IN WISCONSIN (SHEET NO. 2).

Name of Plant

MANUFACTURING DATA CARD

Building No.

Sheet No. 3

Schedule "E"

STRUCTURAL DATA

Use

Foundations		Piers	Concrete	Block	Stone	Brick	Other
Stories	Bas	1	2	3	4	5	6
Fireproof							
Area-sq. ft.							
Superstructure							
Mill							
Modified Mill							
Concrete							
Concrete Reinforced							
Concrete Block							
Steel							
Steel Clad							
Story Height							
Exterior Walls							
Thickness							
Brick							
Brick Veneer							
Concrete							
Concrete Block							
Tile							
Floors							
Earth							
Wood							
Concrete							
Other							
Floor Load							
Light Med. Heavy Spec.							
Column Spacing							
Space Between							
Diameter							
Material							
Roof							
Flat							
Pitch							
Saw Tooth							
Segmented Arch							
Shingle-Wood							
Composition							
Heating							
Steam							
Hot Water							

Building Value Computation

Length in Feet _____

Width in Feet _____

Square Feet (A) \$ _____

Height in Feet _____

Cubic Feet (B) \$ _____

Percent Cost of Reproduction \$ _____

Less Depreciation to Date \$ _____

Present Sound Value \$ _____

Functional Efficiency % _____

Adjusted Sound Value \$ _____

Fixed Machinery and Equipment

General Type _____

Standard _____ Special _____

Age (average) _____

Condition _____

Present Cost of Reproduction \$ _____

Less Depreciation to Date % _____

Sound Value \$ _____

Functional Efficiency % _____

Adjusted Sound Value \$ _____

Extras and Specials

Sprinkler System _____ Adjusted Sound Value \$ _____

Ventilation _____ Adjusted Sound Value _____

Refrigeration _____ Adjusted Sound Value _____

Elevators _____ Adjusted Sound Value _____

Fire Escapes _____

Light and Electrical Equipment _____

Heating _____

Plumbing _____

Air Conditioning _____

Total Adjusted Sound Value \$ _____

Date _____

Book Values

Year	Building	Mach. Eq.	Deprec. Res.	Net
19				
19				
19				

FORM C (CONTINUED). APPRAISAL FORM USED FOR ASSESSING INDUSTRIAL PROPERTY IN WISCONSIN (SHEET NO. 3)

Name of Plant

MANUFACTURING DATA CARD

Building No. Sheet No. 3

Use

Schedule "E"

STRUCTURAL DATA

Foundations: Piers — Concrete — Block — Stone — Brick — Other		Building Value Computation					
Stories	Bas't	1	2	3	4	5	6
Fireproof							
Area—sq ft							
Superstructure							
Mill							
Modified Mill							
Concrete							
Concrete Reinforced							
Concrete Block							
Steel							
Metal Clad							
Story Height							
Exterior Walls							
Thickness							
Brick							
Brick Veneer							
Concrete							
Concrete Block							
Tile							
Floors							
Earth							
Wood							
Concrete							
Other							
Floor Load							
Light, Med, Heavy Spec							
Column Spacing							
Spaced Between							
Diameter							
Material							
Roof							
Flat							
Pitch							
Saw Tooth							
Segmented Arch							
Shingle-Wood							
Composition							
Heating							
Steam							
Hot Water							

FORM C (CONTINUED). APPRAISING FORM USED FOR ASSESSING INDUSTRIAL PROPERTY IN WISCONSIN (INSERT).

PLAN OF PLANT

INDICATE DIRECTIONS 1 DIVISION FEET

The grid is a large square divided into a 20x20 array of smaller squares. The top edge of the grid is labeled with 'INDICATE DIRECTIONS' on the left, '1 DIVISION' in the middle, and 'FEET' on the right. A small sketch of a building is visible in the upper left corner of the grid.

FORM C (CONTINUED). APPRAISING FORM USED FOR ASSESSING INDUSTRIAL
PROPERTY IN WISCONSIN (INSERT)

The Utilization of Modern Assessing Techniques in the Larger Cities

Two studies which indicate the degree of adoption of technical assessing methods in the larger cities of the country have been available to the writer. One is a survey made by the Legislative Reference Section of the New York State Library in 1924; the other, a more comprehensive survey, constituting part of a doctoral dissertation on urban real estate assessment, by Dr. Mathew C. Mitchell in 1927.²⁴ In both surveys, the questionnaire method was utilized, inquiries being sent to the assessing officials of all of the cities over 30,000 population.

THE NEW YORK LEGISLATIVE REFERENCE LIBRARY SURVEY.—In the New York Legislative Reference Library survey, replies were received from 131 cities. Of these, 129 replied to the question "Does your city use a tax map?" Of this number, 60, or almost half of them, replied in the negative. To the very general question "Do you have certain established standards of value for land and for buildings?" 125 replied. Of these replies, 77 were in the affirmative, 48 in the negative. A less favorable showing was made on the more specific question (on unit valuation of land), "Do you have an established table of values by which you determine the relative value of lots of varying sizes?" Of the 129 replies to this question, 69, or more than half, were in the negative. An even worse situation was disclosed by the replies to the specific question on the use of the unit value system for buildings, "Do you have a table of building factors, which, when applied to cubage or square foot floor area, the approximate value of a building may be determined?" Of 129 replies, 80 were in the negative.

THE MITCHELL SURVEY—Tax Maps.—In the more recent Mitchell survey, the proportion of cities over 30,000 population found to be utilizing modern assessing systems was much greater. Replies were received from all but 15 of the 248 cities then over 30,000 in population. To the question on tax maps, worded as follows, "Do you have tax maps showing the metes and bounds of all the separate holdings of real estate within the limits of the taxing district?" 232 cities replied. Of these, 181 answered in the affirmative. The replies from 11 cities were either inconclusive or indicated that the cities were only partially mapped, and 40 cities answered in the negative.²⁵

Unit Valuation of Land.—To the question on the utilization of the unit value system to land, worded as follows, "Have you

²⁴ New York State Library, Legislative Reference Section, *Digest of Methods Used in Making Local Assessments in Cities of the United States over 30,000 Population*, 1924. Mathew C. Mitchell, *Assessment of Real Estate Values in American Cities*, Ph.D. Thesis, Harvard University, 1927, Part III, pp. 180-298.

²⁵ Mitchell, *op. cit.*, pp. 200-204.

adopted the unit foot system?" (*i. e.*, "Do you compute the value of the entire lot by applying a unit value per front foot or square foot?") 229 cities replied. Of these, 184 answered in the affirmative, 18 gave various answers indicating partial use of the system, and 27 answered in the negative.²⁶

Unit Valuation of Buildings.—As has already been described, rules and tables for the determination of land values, *i. e.*, abnormal depth curves and corner value rules, have been frequently published; and they have been adopted quite extensively in jurisdictions other than that for which the rule was first established. Tables of factors of building values are not so easily transferable. This may be a partial explanation to the far more extensive use of land value units than building value units found by Mitchell. To the question "Do you have a standard building classification with unit factors of value based upon the value of a square foot of floor space, or a cubic foot of volume, of each class of buildings?" 228 cities replied. Of these, 124 answered in the affirmative, 16 made various replies which indicated partial use of the system, and 88 answered in the negative.²⁷

Compilation and Utilization of Value Data.—To the question on the utilization of value data, worded as follows, "Do you have the continual collection of information (such as sales records, for illustration) bearing on real estate values, and its preservation in readily accessible and permanent form?" 230 cities replied. Of these, 145 answered in the affirmative, 16 replied in various ways (most of them indicating that data from other governmental agencies, such as the register of deeds, were utilized, but that the assessing officer made no permanent compilation), and 69 answered in the negative.²⁸

Summary.—Correlation between Size of City and Technical Assessing Systems.—Dr. Mitchell has computed the percentages of straight affirmatives to total answers received as follows: Tax maps, 78 per cent; unit foot system for land valuation, 80 per cent; the standard building classification, 54 per cent; the continual collection and preservation of information bearing upon real estate values, 63 per cent. According to these figures, the greater portion of the 248 largest cities of the country have made some progress toward the installation of technical assessing systems, although a considerable proportion of them do not use the most approved methods as yet. The least progress in this group has been made in the cities with smaller populations, the most progress in the larger cities. This is conclusively demonstrated by a sub-classification of the cities into the five census sub-groups, as shown in the tables below.

²⁶ Mitchell, *op. cit.*, pp. 226-231.

²⁷ *Ibid.*, pp. 239-244.

²⁸ *Ibid.*, pp. 253-257.

TABLE LXXXVIII

RELATIONSHIP BETWEEN SIZE OF CITIES AND EXISTENCE OF COMPONENTS OF TECHNICAL ASSESSING SYSTEMS, CITIES OF 30,000 AND OVER, 1927.^a

		Yes	Partial	No	No reply
Sub-Group I 500,000 and over 12 cities	Tax Maps	9	1	0	2
	Unit Value System: Land . .	9	1	0	2
	Unit Value System: Buildings .	8	1	1	2
	Value Records	7	3	0	2
Sub-Group II 300,000-500,000 11 cities	Tax Maps	10	0	0	1
	Unit Value System: Land . .	9	0	1	1
	Unit Value System: Buildings .	9	0	1	1
	Value Records	9	0	1	1
Sub-Group III 100,000-300,000 53 cities	Tax Maps	46	1	3	3
	Unit Value System: Land . .	43	6	2	2
	Unit Value System: Buildings .	30	5	14	4
	Value Records	34	7	10	2
Sub-Group IV 50,000-100,000 81 cities	Tax Maps	64	2	12	3
	Unit Value System: Land . .	63	6	7	5
	Unit Value System: Buildings .	30	3	34	5
	Value Records	46	5	25	5
Sub-Group V 30,000-50,000 91 cities	Tax Maps	53	7	25	7
	Unit Value System: Land . .	60	5	17	9
	Unit Value System: Buildings .	38	7	38	8
	Value Records	49	1	33	8

^a Based on Mitchell, *op cit*, Part III

If the five sub-groups be assigned average ratings on the basis of the partial or complete utilization of such equipment and methods, these ratings are as follows:

TABLE LXXXIX

RATINGS FOR UTILIZATION OF MODERN ASSESSING METHODS, BY SIZE OF CITY GROUPS, CITIES OF 30,000 AND OVER^a

	Per Cent
Sub-Group I	97.5
Sub-Group II	92.5
Sub-Group III	85.6
Sub-Group IV	74.5
Sub-Group V	66.0

Whereas partial or complete utilization of the components of modern technical assessment system were found in almost all of the 23 largest cities of the country, the proportion of cities not employing such methods becomes quite substantial in the case of cities of from 50,000 to 100,000 population, and is especially large in the case of cities with population of from 30,000 to 50,000. Thus, no unit system for valuation of buildings was used in 34 of the 81 cities of sub-group IV, and no value records maintained in 25 of these cities. In sub-group V, no unit system for valuation of buildings was employed in 38 of the 91 cities; no value records maintained in 33; and even such a bare essential as tax maps were lacking in 25.

^a Each rating is an unweighted arithmetic average of the proportion of partial and affirmative answers to the total number of answers received.

The Utilization of Modern Assessing Techniques in the Smaller Cities

THE EVIDENCE ON ASSESSMENT TECHNIQUES IN THE SMALLER CITIES.—The available evidence on the utilization of modern assessing methods for cities of less than 30,000 population is not so definite and specific as in cities over this size. However, there are sufficient materials upon which to base valid conclusions. In addition to the field investigations described in Part II of this report, there are the implications of the trend toward increasing absence of technical methods with decreasing populations disclosed in the Mitchell study for the largest cities, and a study of all of the cities in the state of New York, in which the validity of projecting this trend to cities of less than 30,000 is confirmed.

The Field Surveys.—In general, it has been found in the field studies that assessment methods in the smaller cities of the country are still primitive and crude. There are wide variations, and modern techniques have been found to be much more conspicuously absent in some states, such as Wyoming (where they were found to be practically non-existent), than in others, such as New York and Connecticut (where they have been established in a very substantial proportion of the cities). On the whole, however, the field investigations point to the conclusion that the majority of the smaller cities of the country have not yet adopted technical assessing methods.

The Correlation between Size of City and Modern Assessing Systems Found by Mitchell.—The above findings are in general conformity with the trend revealed in the Mitchell survey for the smallest of the 248 cities over 30,000 population to have made the least progress. There was a definite trend for the degree of utilization of modern assessing systems to decline as the cities became smaller, and in the cities of the lowest sub-group, namely, that containing cities of from 30,000 to 50,000 population, the components of the unit value system were found to be lacking in a very substantial number of them. One would expect a continuation of this trend in cities with populations of considerably less than 30,000.

The Correlation Found by Cornick in New York.—The conclusion arrived at on the basis of the two sets of data, described above is corroborated by the results of a classification showing the relationship between the size of cities and their assessing methods in the State of New York. This classification was made by Mr. Philip H. Cornick, of the National Institute of Public Administration, in his study of assessment conditions in New York, prepared for the New York State Commission for the Revision of the Tax Laws of 1932.

Of the 60 cities of the State of New York, 13 contain more than 50,000 inhabitants. Of these, the three largest, namely, New York, Buffalo, and Rochester were found to have modern assessing systems. In the other ten, five, namely, Niagara Falls, New Rochelle, Yonkers, Binghamton and Syracuse, had adopted assessment techniques which include all or most of the components of the unit value system. The remaining five had all made some progress toward the installation of such systems.

Of the 47 cities with population of less than 50,000, 11 had fairly complete assessment systems, and 13 had made some progress toward that end. About half the cities in this group had made very little progress toward technical assessment. Moreover, there was a definite tendency for the largest of them to have advanced the furthest. Table XC is quite conclusive on this point. It was prepared by Mr. Cornick on the basis of material obtained from the New York State Bureau of Municipal Information, the *Report of the Joint Legislative Committee on the Assessment of Real Property* (Legislative Document (1931) No. 70) and personal observations.

TABLE XC

ASSESSMENT SYSTEMS IN THIRD CLASS CITIES OF NEW YORK, 1932 ^a

SIZE GROUP	Number in group	Adequate systems	Progress toward systems	Undeveloped systems
Largest	8	4	1	3
Second	8	2	5	1
Third	8	3	1	4
Fourth	8	0	3	5
Fifth	8	1	2	5
Smallest	7	1	1	5
Totals	47	11	13	23

^a Source: *Report of the New York State Commission for the Revision of the Tax Laws, 1932*, Memorandum No. 3, p. 24.

In the largest 24 cities of this group, 9 had adequate systems; 7 were making progress toward their development; and 8 were badly deficient in this respect. In the smallest 23 cities, only 2 cities had adequate systems; 6 were making progress toward their development; and 15 were badly deficient.

SUMMARY.—On the basis of the evidence found in the field surveys, the trend found in the Mitchell study, and its confirmation and application to all of the cities of New York revealed in the Cornick study, it can be definitely concluded that the majority of the smaller cities of the country are still lagging badly in the matter of modern assessing methods.

Adaptations of the Unit Value System in the Smaller Cities

In establishing the unit value system, the smaller cities have sometimes made modifications in order to adapt the system to their own peculiar circumstances. One of the most important of such adaptations is the use of the square foot unit rather than the front foot unit for land valuation in smaller municipalities. The front foot method of valuation is based on the pronounced differential between the value of the front area of a lot and its rear area. In smaller cities, especially in suburbs consisting largely of residential properties, the situation is quite different. In commenting on assessment methods in Westchester county, New York, the following observations on the use of the square foot unit (as used in Scarsdale) were made in the report of the Westchester County Emergency Work Bureau. Mr. Wayne D. Heydecker was director of this project.

"For an area dominantly residential in character, in which the development is controlled by strict zoning laws, the prevalent method of assessing on the basis of unit front foot values may prove to be wholly inappropriate. It must be remembered that the unit front foot value method of assessment arose in American cities whose dominant pattern was the checkerboard plan and under conditions in which every dwelling site was potentially susceptible of ultimate conversion for business or other more extensive uses. Thus, when new blocks in New York City were subdivided into the conventional 25 foot lots, not only the corner lots and the avenue lots, but in many cases, adjacent inside lots were destined ultimately to become business frontage.

"Under these circumstances, the Hoffman-Neill Rule of giving to the front half of any lot 100 feet or less in depth two-thirds of its total value evolved quite naturally and appropriately. This method of assessing spread all over the United States in one form or another and gave rise to the modifications which have been observed and previously discussed in this report.

"Since this development, there has grown up in American jurisprudence the extension of the use of the police power commonly known as zoning, under which a definite character of use has been imprinted upon the land and its conversion to other more intensive uses has been, if not prevented, at least greatly retarded. At the same time, the use of the rectangular street pattern has been abandoned in many residential subdivisions; winding streets have been laid out so as to follow the contour lines; and the lot shapes and sizes vary greatly from one part of the block to another. In such a pattern, and under modern residential conditions, an area at the rear of the lot may be just as valuable as an adjunct to the dwelling itself as a strip of equal area along the front. It is the whole of the residential plot which constitutes the frame for the dwelling, and under these circumstances the Scarsdale tax authorities have recognized that fact by placing their assessments upon a standard unit square foot basis.

“It is not at all beyond the realm of possibility that the Scarsdale method in this respect may become the model for the assessment of suburban residential real estate whenever the latter is protected by adequate zoning ordinances.”²⁹

Assistance by Commercial Appraisal Firms

In connection with the installation of assessment systems in cities, there has grown up in the United States a number of commercial appraisal firms which specialize in making unit value assessments for municipalities. The question is often raised whether it is proper for a municipality to employ such assistance.

THE CASE FOR THE AFFIRMATIVE.—The case for the affirmative was stated by Mr. Walter F. Pollock at one of the Conferences of the National Tax Association.

“If a private appraisal company or any company or individual has the ability to supply valuable services or formulas to public assessors at reasonable cost, there should be no more limitation placed upon such employment than is now placed upon the employment of architects to prepare plans for public buildings, engineers to advise public officials upon waterworks, sewer or park problems, or accountants to install uniform accounting and auditing systems to prevent waste and fraud in the expenditure of public funds after they have reached the public treasury. All the waste and fraud that is possible through corrupt attacks upon public treasuries in the most careless or the most venal municipality is absurdly insignificant in amount in comparison with the public robbery that is known to exist in nearly every American community, by reason of the lack of equitable standards for the measurement of real property values, in the inequality of collecting the money into the public treasuries. . . . Anyone who proposes a remedy for this wrong is entitled to be heard and to have his claim given careful examination. The public assessor, I submit, should be given every possible means for making his assessments scientifically equitable, if that is possible. Upon the equity of his work depends the justice of the entire structure upon which our municipal, township, village, county and state governments are administered. It is his duty to appraise all holdings upon a basis that will insure equity and just proportion to every property owner, and when he fails to do this the structure of government is seriously undermined. Why should the assessor not be given every opportunity to use the best possible tools that may be found, to aid him to obtain equity in tax valuations? What honest and consistent objection can be made to the principle that assessors, universally acknowledged to need assistance, should be free to seek assistance wherever they can obtain it?”³⁰

²⁹ Westchester County Emergency Work Bureau, *Report on the Preparation of the Land Value Map of Westchester County, 1933*, p. 13.

³⁰ W. W. Pollock, “An Equitable Standard for Land Valuation,” *Proceedings of the National Tax Association, Seventh Conference, 1913*, p. 234, *et seq.* Citation, pp. 238-240.

THE CASE FOR THE NEGATIVE.—The case for the negative was stated at this same conference by Mr. A. C. Pleydell, who read from a letter which he had written when his advice had been sought on the question by officials of Philadelphia, as follows:

"The assessment of property for the taxation is a governmental function, which should not be contracted out to private individuals. To determine the relative values of real estate requires the exercise of judgment and discretion, and involves not merely the doing of justice between the individual property owners, but, also, the determination of the amount of their contributions to the public revenues. This is too serious and vital a matter to be turned over to contractors, however well-qualified these might be to furnish a technically correct valuation.

"If assessment conditions in any city are bad, they will not be permanently corrected by bringing someone from the outside to make a valuation by a method of their own, for, in subsequent years, the same inequalities will reappear. The only way to secure good assessments is to have public officials who are capable of doing their work, and have them work out a system which can be used by them and their successors.

"I do not like the idea of any assessment officials, chosen by the people of their localities to employ their own judgment on assessment work, surrendering their independence and giving a contract to an outside company to come to the city and make valuations. If we are to have private companies administer the affairs of government by contract, we might as well quit electing public officials.

"The great importance of agitating the assessment question is to train up the public officials, and also the people of the community, to a realization of the correct principles of valuation and taxation. Most of this result will be lost if the only outcome of an agitation is to secure the employment of private contractors to come to a city and arbitrarily place some valuations, which may or may not be correct, but even if correct, do not help educate the people.

"Merely to have assessments made equal between individuals in the community is a small matter alongside the great question of having at least a considerable number of intelligent people in that community understand what makes these values and how assessments are to be equalized."³¹

APPRAISAL OF THE ARGUMENTS.—There is a rather strange confusion of means and ends in the argument of Mr. Pleydell. It is very difficult to accept his relative weighting of the high importance of a well-informed, "assessment-conscious" public and "merely" having assessments equitable. After all, appraisal and assessment are difficult tasks, the intricacies of which are beyond the scope of the untrained layman. It is not necessary that the public

³¹ A. C. Pleydell, *Proceedings of the National Tax Association, Seventh Conference, 1913*, pp. 267-268.

be well versed in assessing technique. All that is required for a sound public state of mind is confidence that the work is being fairly and competently done. Again, the fact that equitable assessments are a serious and vital matter is more reason than not why the best possible assistance should be sought.

However, Mr. Pleydell put his finger on the essence of the matter when he called attention to the fact that expert commercial assistance may not result in *permanency* of good assessing. There can be no denial of the fact that the function of assessing requires *continuous* expert administration. It is also true that arousing public interest for the securing of assessment reform is not an easy matter and that temporary retention of an expert commercial firm may waste the opportunity for possible permanency of the reform.

Mr. Pollock draws the analogy of assessment work and architectural and engineering work. Where the latter is rarely undertaken, the retention of a private expert architect or engineer is certainly commendable because here the government has no need of permanently retaining an expert. Where the need for such work is continuous, however, surely Mr. Pollock could not sincerely recommend that inexperienced officials be employed and that private experts be then retained to assist them! In both these cases, obviously, the government should employ competent experts directly.

Present Status of Assessing Technique in Rural Communities

The usual methods employed in the assessment of rural property are very crude "Originally" set by either owners themselves, or by assessors upon the basis of general familiarity or superficial inspection, the usual "technique" of rural assessment consists in the copying of former figures, making a few changes upon entering office (out of political gratitude or friendship) and crude horizontal adjustments in times of violent changes of values. These are exceptions,—deviations from this general characterization. Some assessors actually attempt to make a fair "equalization" of assessments upon entering office, but these are often based upon incomplete knowledge of the physical and economic character of properties, and hence the resulting assessments are still inequitable. In recent years, however, there has been, in a few states, a definite trend toward the development of technical methods of assessing rural real property, comparable to those used in assessing urban real property.

Unit Valuation in Rural Assessing

At the time that Mr. Somers was developing methods of urban assessing technique, he did not disregard the rural problem. In the pamphlet written in 1901, for example, he proposed a four-fold eight-page folder for rural assessors, on which the assessor was

to enter the location of the tract; the name of the owner; the type of the road; the character of the fencing; the nature of the water supply; the use of the land; detail on the construction of the house and of other buildings; and other information. In this pamphlet he also discussed the importance of maps and the desirability of classification of the land with establishment of lowest, highest and average values per acre.³² At the time little attention was apparently paid to these suggestions. Rural assessing technique has not developed in the same manner as urban. The state has been much more active. Indeed, the development began with land classification as an aid to state equalization.

^A
ORIGINS: LAND CLASSIFICATION.—As has been stated above, the real beginning of technical methods of assessing rural property was land classification. The thought was somewhat as follows: "If we can have the assessors break up the properties into classes of land, and designate the price per acre of specific types of land, we can much more readily discover unjustifiable differences and make a better equalization. At the same time, this break-up into acres should bring about better original assessment because the assessor will have made a better analysis of the property and will have more detailed facts upon which to base his judgments."

This general policy was most suited to states where lands were homogeneous in character and where complex differentials caused by the existence of urbanization and industrialization were either non-existent or of little importance. The prerequisites were similar to those of the prerequisites for the colonial system of pre-equalization (and indeed the plan came to take on other similarities to this system later on). Because of these considerations, land classification policies for assessment purposes have made most headway in the states of the "wide-open spaces" of the Central and Mountain regions.

The movement got off to a real start as a result of an address at a Conference of the National Tax Association in 1909 by Dr. L. G. Powers, then Chief Statistician of the Bureau of the Census.³³ Dr. Powers made a plea at this time that the various state tax commissioners provide a uniform classification of real estate, pointing out its value for comparative statistical purposes, and for better equalization and assessment. He also suggested a specific land classification plan.

³² W. A. Somers, *The Valuation of Real Estate for the Purpose of Taxation*, 1901, pp. 7-17.

³³ Prior to this time, Illinois had provided for a division of real estate into improved and unimproved acre land and improved and unimproved city land. Minnesota had, in addition to this, also separately listed rural and city improvements. Colorado had classified acre property into agricultural land, grazing land, coal land, oil land and other mineral land, and assessors had been required to prepare statements of acreage and value. They had also been required to separately assess improvements. However, interest in classification of land for purposes of taxation was not greatly aroused by these precedents until brought to the fore by Dr. Powers, himself. L. G. Powers, "Uniform Listing of Real Estate," *Proceedings of the National Tax Association*, Third Conference, 1909, pp. 321-332.

The Report of the National Tax Association Committee of 1910.—A committee was appointed to investigate the subject, and in the following year, the basic recommendations of Dr. Powers were approved and a working plan elaborated. The recommended classification for rural lands consisted of the following subdivisions:

- | | |
|----------------|-----------------|
| (1) Cultivated | (5) Mineral |
| (2) Arable | (6) Quarry |
| (3) Orchard | (7) Oil and gas |
| (4) Timber | (8) Waste |

The following instructions were recommended:

"In assessing rural lands, the assessor shall ascertain as nearly as he can, and enter upon his field book:

- "1. The area in acres of each separately assessed parcel.
- "2. The amount in acres and fractions of an acre of each of the eight classes of rural land contained within such parcels.
- "3. The minimum and maximum value of an acre of each of the eight classes of rural land within his district.
- "4. The value of the amount of each of the eight classes of rural land contained in each separately assessed parcel.
- "5. The total value of the amounts of all classes of rural land contained in each parcel.
- "6. The total value including buildings and improvements of each farm or separate parcel.
- "7. The name of the reputed owner of each separate parcel."³⁴

Adoptions and Adaptations.—Kansas was the first state to follow the recommendation of the committee for classification, although with certain modifications. These modifications were made in order to adapt the plan to the character of Kansas lands, which are almost entirely agricultural. The classes established by the Tax Commission were cultivated; arable; timber: (a) used for pasture; (b) not so used; orchard; pasture: (a) tillable; (b) non-tillable; waste.³⁵ Arizona followed in 1914 and shortly afterward, all of the Mountain states, and a number of the Central states came to adopt the principle. In general, the classifi-

³⁴ "Report of the Committee on Uniform Classification of Real Estate," *Proceedings of the National Tax Association*, 1910, pp. 313-339; citation at pp. 335-339.

³⁵ S. T. Howe, J. A. Burnette, and B. F. Milton, "Classification of Real Estate," *Proceedings of the National Tax Association*, 1912, pp. 355-369. See also paper by J. A. Burnette, "The Classification of Real Estate," *Proceedings of the Third Biennial Conference Convention of the Tax Commission and the County Assessors of Kansas*, December 19-20, 1911, pp. 10-15.

cation recommended by Dr. Powers was modified by the various states so as to cover their particular needs.³⁶ In some of the states, not only a classification has been established, but also values for these classes are set by the state tax officials.³⁷

Methods and Results of Land Classification.—In most cases, the assessors themselves have made the classifications. In Montana in 1918 and in Utah in 1919, it was provided that special county boards perform this work. Neither of these two plans have proven very satisfactory. As to the first, namely, classification by the assessors, this has often degenerated into classification by owners themselves. Thus, when a seasoned assessor of Louisiana was called upon to describe the experience of his state with respect to classification of lands (in a discussion on the subject at a Conference of the National Tax Association in 1925) he had replied: "I am afraid that I cannot answer the gentleman to his satisfaction with reference to classification of land. It is like all other matters of assessment. It has not been reduced to a scientific basis, and the practical application of it, in my experience, has been that it is left almost entirely with the land owner."³⁸

And other evils have developed, as, for example, in Nevada. The following account is from the Report of the Tax Commission

³⁶ Thus at the present time, Arizona classifies its rural lands into irrigated, dry farming, grazing and waste. In Colorado, rural land is classified into improved fruit, irrigated, natural hay, dry farming, grazing, waste, timber, and various mineral and oil classes. Idaho classifies its rural land into agricultural, cut-over and burnt timber, irrigated, pump, dry, timber, grazing, waste, and mineral. Montana segregates irrigated tillable, non-irrigated tillable, grazing, timber, and waste. Nevada's main types are special agricultural (exceptionally valuable because of location or other reasons), cultivated, wild hay or meadow, pasture, arable, grazing, mountain or barren. In New Mexico, the classification includes agricultural, grazing, timber, and miscellaneous. Utah's classification of farm land shows improved farm (two types: dry and irrigated), unimproved farm, fruit, grazing and miscellaneous. Wyoming's classification is very extensive, segregating irrigated cultivated (two classes), irrigated uncultivated, irrigated pasture, dry farm, grazing (three classes), waste and bog as well as various classes of mineral, timber and coal lands. In Minnesota, assessors are required to classify lands into cultivated, meadow, pasture, cut-over, timber, waste and roads. In Wisconsin, rural lands are subdivided into three classes of agricultural land, the best, the middle and the poorest in a district; wild hay and wild pasture; marsh, cut-over and waste; and timber. Louisiana classifies its lands into agricultural, pasture, woodlands, sea marsh, fresh water marsh, trapping land, and various classes of timber and mineral lands. In North Dakota, rural lands are divided into tillable and non-tillable. More elaborate classification is optional with the county commissioners. In Texas, improved lands are to be divided into three classes, first, second, and third. In Mississippi, cultivatable and uncultivatable lands as well as timber are segregated. In South Dakota, there is no requirement for classification of land, but a number of the counties have attempted classifications for equalization purposes.

³⁷ Thus, in Wyoming, *maximum* and *minimum* values per acre by classes and subclasses, are suggested annually. In Nevada, *minimum* values per acre are set by classes and subclasses; in Louisiana, *average* values. In New Mexico, values for *grazing lands* are set by the Tax Commission.

³⁸ J. W. A. Jeter, *Proceedings of the National Tax Association*, 1925, p. 76.

for 1925-1926: "In 1917 the State Tax Commission adopted the plan of classifying all lands for taxation purposes. There were six classes, ranging from the highest priced cultivated lands to the lowest priced mountain or 'barren' land. Each class was divided into from three to five subclasses. The value for assessment purposes was set opposite each subclass. Thus the way was made easy and simple for the assessor and the problem of equalization seemed to be solved. But this plan still left it to the discretion of the assessor to allocate lands to the various classifications, and it soon developed that all assessors did not show the same nice perception in judging lands; the way was still open for the assessor to serve his own purpose in assessing and the accommodating official still had the opportunity to show favoritism as before. As a result, there is much less high priced land on the assessment rolls today than when the classification plan was adopted. There has been a tendency from year to year to reduce lands to lower classes, and the average value per acre of land for assessment purposes throughout the state has been steadily on the decline."³⁹

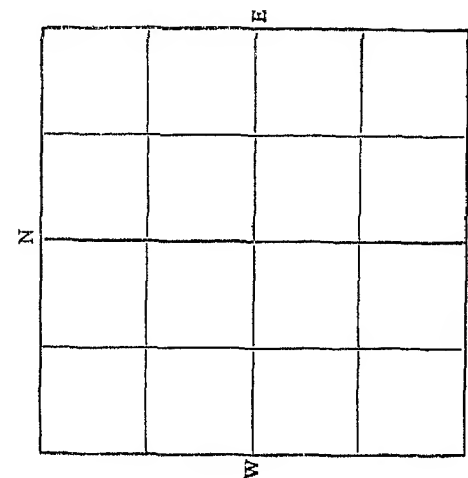
The results of the work of the special county boards in Utah and Montana were somewhat better. Thus, the State Board of Equalization of Utah commented on the 1919 classification as follows: "While the work of the appraisers in some instances was not as efficient as we had a right to expect, still we feel that the results were well worth the efforts."⁴⁰ In Montana, the work was rather hurriedly and poorly made at first, although much improvement has been made in recent years, according to a letter received from the State Board of Equalization of that state.⁴¹ However in neither of these cases were the results as good as they could have been.

MORE RECENT DEVELOPMENTS.—The next steps in the development of rural assessing technique have been taken by a group of midwestern states. In these states, land classification has constituted the nucleus of the method, but various refinements and modifications have been made. The use of field books, appraisal cards and data sheets, comparable to those used in modern urban assessing has been introduced; in these forms, crude classifications have been replaced by more elaborate classifications, and other relevant value factors such as distance from market, roads, schools, etc., have been included. The state tax officials of Minnesota, Iowa and Wisconsin have taken a particularly active part in developing the unit system of valuation for rural areas. A brief description of the methods advocated in these states is given below.

³⁹ *Biennial Report of the Nevada Tax Commission, 1925-1926*, p. 9.

⁴⁰ *Report of the State Board of Equalization and Assessment of Utah, 1919-1920*, p. 7.

⁴¹ Letter from Mr. James H. Stewart, Chairman, State Board of Equalization of Montana, under date of June 22, 1934.



NOTES.

15 horizontal lines for notes.

FORM D (CONTINUED). MINNESOTA RURAL ASSESSING CARD REVERSE SIDE.

Minnesota.—In 1928, the Minnesota Tax Commission began to require the use of appraisal cards throughout the entire state for the assessment of improved real property. On the rural cards, the assessor is required to fill in the number of acres and the price per acre of cultivated, meadow, pasture, cut-over, timber, waste, and road land. He is also called upon to describe the soil type and topography of the land, whether loam, clay, sandy or stone and whether level, rolling or hilly. There are also blanks calling for detail on the house, barn, and other structures. On the reverse side of the card is a space for a sketch of the property, and for notes. In its *Assessors' Manual*, the Tax Commission carefully admonishes the assessors to consider not only the quality of the soil and the character of the land, but also such factors as proximity to good highways and distance from markets, schools, churches, etc.⁴² Also in its *Manual*, the commission has prepared a standard building classification, with cubic foot units costs for various types and grades of farm structures as follows:

⁴² Minnesota Tax Commission, *Assessors' Manual*, 1934, pp. 9-11.

Twp.

Owner..... Address.....

DESCRIPTION

Located..... miles from..... Township..... Range..... Acres.....
 (Dirt — Gravel — Paved) (If not on main traveled road, give distance to same.....) Railway

School is..... miles in..... (Rural — Independent — Consolidated) District

What is average value per acre of improved farms in this neighborhood?..... \$.....
 Soil Type..... Subsoil.....

Character of Land.....
☐ Clay. ☐ Loam. ☐ Gumbo ☐ Sandy ☐ Stony. ☐ Level ☐ Rolling ☐ Hilly ☐ Acres fully tilled?..... Acres needing tile?.....

Drainage..... Located in drainage district?..... Name or number?.....

CROPS, 1932

	Kind and Value of Lands	
Corn.....	Cultivated..... A at \$.....	per A \$.....
Oats.....	Native Hay..... A at \$.....	per A \$.....
Wheat.....	Pasture..... A at \$.....	per A \$.....
	Upland..... A at \$.....	per A \$.....
	Bottomland..... A at \$.....	per A \$.....
	Swamp..... A at \$.....	per A \$.....
Total.....	Timber..... A at \$.....	per A \$.....
Cultivated.....	Brush and Cutover..... A at \$.....	per A \$.....
Total Value of 1932 Crop.....	Wasteland..... A at \$.....	per A \$.....
How many years has this land been cultivated?.....	Alkali..... A at \$.....	per A \$.....
How much quack grass, Canada or sow thistle or other noxious weeds on the premises?..... Acres	Total true and full value of land \$.....	

IMPROVEMENTS

Kind?..... Condition?..... Acres fenced?.....
 Fences..... Is there one main well?..... Drilled, bored or dug?..... Windmill?.....
 Water..... Any other wells?..... In use?..... Rainwater cistern?.....
 Supply..... Other sources of water supply?.....

FORM E IOWA RURAL ASSESSING DATA SHEET.

DESCRIPTION OF STRUCTURES

Dwelling	Age and Size		Condition	Construction	Basement	Roof		Heat		Present Value
	Built 19	Age				Shingles	Asbestos	Stoves	Hot Air		Hot Water	Steam
Size and Description	Est Cost of Dwelling \$	Age	Less Depreciation	Condition	% Amt. Depreciation	% Amt. Dep.				
			GOOD	FAIR	Est. Cost	% Dep.				
Addition		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Barn		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Crib (Double or Single)		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Granary		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Hog House		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Chicken House		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Garage		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Machine Shed		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Silo		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Windmill		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Other Structures		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			
Machinery permanently attached to real estate		Yrs.	<input type="checkbox"/>	<input type="checkbox"/>	\$		<input type="checkbox"/>			

RECAPITULATION

Kind of Machinery	Total full value of structures \$
True and full value lands	\$
True and full value structures, including attached machinery	\$
True and full value land and structures, including attached machinery	\$
Roll No	Taxable Value \$

NOTE Use check mark (✓) in square to indicate kind of land and structures, and condition.

IOWA STATE BOARD OF ASSESSMENT AND REVIEW: TABLES OF FACTORS OF VALUES AND DEPRECIATION FOR RURAL BUILDINGS 1933
APPROXIMATE COST OF FARM BUILDINGS PER SQUARE FOOT OF
GROUND MEASURE

A — Dwellings

FRAME	1 Story Constr.		2 Story Constr.		Improvements
	Cheap	Good	Cheap	Good	
(Small cellar, post foundation, no improvements)	\$1.00	\$1.25	\$1.40	\$1.75	(1) Good porches,
(Large cellar, masonry foundation, no improvements)	1.25	1.55	1.75	2.20	(2) Hardwood finish downstairs, (3) Electric lights,
(Large cellar, masonry foundation, with improvements)	1.60	2.00	2.25	2.80	(4) Furnace heat; (5) Plumbing If building has
BRICK OR STONE					one improvement use square foot price designated
(Small cellar, masonry foundation, no improvements)	1.40	1.75	1.95	2.45	"Cheap." If the building has three improve-
(Large cellar, masonry foundation, no improvements)	1.50	1.90	2.10	2.60	ments, use square foot price designated "Good"
(Large cellar, masonry foundation, with improvements)	1.80	2.25	2.50	3.15	If the building has all improvements, increase the
					square foot price accordingly.

B — Frame Barns

HAY BARN	1 Story Constr.		2 Story Constr.		Improvements
	Cheap	Good	Cheap	Good	
(No floor, post construction, ordinary height)					(1) Good porches,
(Floors, good, grade construction, ordinary height)					(2) Hardwood finish downstairs, (3) Electric lights,
HAY AND COW BARN					(4) Furnace heat; (5) Plumbing If building has
(With modern equipment and masonry foundation)					one improvement use square foot price designated
HORSE AND COW BARN					"Cheap." If the building has three improve-
(Single story with modern equipment and masonry foundation)					ments, use square foot price designated "Good"
(Single story without modern equipment or masonry foundation)					If the building has all improvements, increase the
Silos, water tanks and towers, according to size and material of construction					square foot price accordingly.

C — Corn Crib and Granaries

CORN CRIB	1 Story Constr.		2 Story Constr.		Improvements
	Cheap	Good	Cheap	Good	
(No floor, post construction, ordinary height)					(1) Good porches,
(Floors, good, grade construction, ordinary height)					(2) Hardwood finish downstairs, (3) Electric lights,
CORN CRIB					(4) Furnace heat; (5) Plumbing If building has
(With modern equipment and masonry foundation)					one improvement use square foot price designated
HORSE AND COW BARN					"Cheap." If the building has three improve-
(Single story with modern equipment and masonry foundation)					ments, use square foot price designated "Good"
(Single story without modern equipment or masonry foundation)					If the building has all improvements, increase the
Silos, water tanks and towers, according to size and material of construction					square foot price accordingly.

TABLE OF DEPRECIATION FOR FARM BUILDINGS

Old buildings are not as valuable as new buildings and will not add much to the value of the land. Every year they depreciate due to wear and tear and the action of the elements. They also depreciate by becoming out of date and not so desirable for the uses for which built as buildings of modern construction is suggested for farm buildings.					
A — FARM DWELLINGS (Frame on stone foundation)	2.5%				
B — BARN (On stone foundation)	2.5%				
C — SHEDS (Frame construction without stone foundation)	7%				
D — OTHER FARM BUILDINGS (Without foundation)	5%				

<i>Dwellings:</i>	<i>Cents</i>
Frame, shingle roof, good condition and finish . . .	16 to 20
Frame, shingle roof, medium construction and finish . .	12 to 15
Frame, small box house, cheap structure and finish . . .	8 to 10
Brick, shingle roof, modern, and of good construction . .	22 to 26
Brick, shingle roof, medium construction and finish . . .	18 to 22
Stucco, shingle roof, good construction and finish . . .	20 to 24
<i>Barns:</i>	
Frame, shingle roof, painted, good foundation	8 to 12
Frame, shingle roof, not painted, medium construction .	5 to 7
<i>Garages:</i>	
Frame, concrete footings and floors	8 to 12
Frame, block foundation, no concrete	5 to 7
Granaries, frame, and of good construction	8 to 12
Machine sheds	4 to 6
Coin cribs	3 to 5
Silos of varying types	\$300 to \$800 ¹³

Iowa.—In 1931, "data valuation sheets" were used in Iowa. These sheets are somewhat similar to the Minnesota appraisal cards. There are blanks for the kind and value of land, including soil type, crop and drainage detail; also for the location factors, such as distance from roads and schools. In its Assessors' Manual, published in 1933, value factors per square foot for different types of farm buildings are given, together with rules for the computation of depreciation. On the forms, provision is made for extensive detail on the age and condition of buildings, their estimated costs, and the amount of depreciation. The forms and tables are shown on pp. 295-297.

Wisconsin.—As in practically every other aspect of assessment administration, Wisconsin has taken the lead in the development of rural assessing methods. Here the system of unit valuation has been extensively developed under the guidance of the supervisors of assessment. As in the case of technical urban assessment, the method used is to break up representative sales into unit values, and then apply the latter to all the properties to be assessed.¹⁴

In arriving at the unit prices derivable from a representative sale, the farm is first broken up into its component land types and subtypes. Land value units are then established, which when multiplied by the number of acres of each type and subtype, will, together with the value of the improvements, yield the sales price. By aggregating a number of such unit values, *average* unit values applicable to the properties in a tax district may be established. In the determination of the unit values, the location factors as well as the use and fertility factors are taken into account. Thus, in addition to a classification of the land (on the basis of texture, fertility, and other physical characteristics), other factors, such as distance to market, nature and condition of highways, distance to church and school, character of the people, facilities for amuse-

¹³ Minnesota Tax Commission, *Assessors' Manual*, 1934, p. 12.

¹⁴ L. B. Krueger, "The Classification of Farm Lands for Assessment Purposes in Wisconsin," *Journal of Land and Public Utility Economics*, May 1932, *passim*.

ment, and type of ownership, are to be taken into account. In the districts most advanced in the development of assessing methods, maps showing trading centers, churches, principal roads (by types of construction) and representative sales during recent years, as well as principal physiographic features, such as soil types, swamps, timber, cut-over areas, etc., have been made. In towns which have special problems to grapple with, these maps are sometimes made by the supervisor of assessments, but more often they are prepared by the local assessor in co-operation with the supervisor.

These maps may eventually be developed into acre value maps, comparable to the front foot value maps used in urban assessment. Because of the fact that rural land valuation must take into account land utilization and soil productivity factors as well as location factors, there will, however, be important differences.

Lines of Future Development.—By developing unit acre values for different types of lands, and taking into account the location factors, "scientific" assessment of rural properties may be achieved. In the development of techniques for rural assessment, rules for the determination of the location factors would be valuable aids. Various attempts have been made to develop such guides,—some specifically aimed at the facilitation of unit value assessment; others, in the general field of rural land economics.

Rural Location Factors: Roads, Distance from Market, and Values—The findings of various investigators on the relationship of roads and values have been extremely diverse. Haas, by means of correlation and cross tabulation analysis of sales prices of 160 farms, found farms on gravelled roads to be worth about \$22 per acre more than those on dirt roads, in Blue Earth county, Minnesota, in 1919.⁴⁵ In a study made in southern Wisconsin by the United States Department of Agriculture in 1924, the differential was found to average only \$3 per acre.⁴⁶ Again Ezekial in a correlation analysis study of farms in Chester county, Pennsylvania, found gravel or broken stone roads to give a superiority of \$15 per acre.⁴⁷ Ezekial, in this study, found that hard surfaced roads gave a superiority of \$31 per acre. In the Wisconsin study, this differential was about \$18. In a study made by Tennant in New York, it was estimated by farmers that, on the average, the differential between hard-surfaced roads and dirt roads was \$15.58; as between gravel and hard-surfaced roads, \$12.50.⁴⁸

⁴⁵ G. C. Haas, *Sales Prices as a Basis for Farm Land Appraisal*, Minnesota Agricultural Experiment Station Technical Bulletin No. 9, Nov 1922, pp. 15-17.

⁴⁶ E. H. Wiecking, "Factors Determining the Value of Farm Real Estate in the United States," *Proceedings of the Second International Conference of Agricultural Economists*, 1930, p. 1016.

⁴⁷ M. Ezekial, *Factors Affecting Farmers' Earnings in Southeastern Pennsylvania*, United States Department of Agriculture Bulletin 1400, April 1926, p. 53.

⁴⁸ J. L. Tennant, *The Relationships between Roads and Agriculture in New York*, Cornell University Agricultural Experiment Station Bulletin 479, May 1929, p. 36.

To a very large extent, these variations may be explained by the diversity of conditions in the various localities for which studies have been made.

For instance, the differential will be greater in areas where the farms are more valuable. This is illustrated by a classification made in the Tennant study. Farmers were requested to estimate the increase in value per acre which would occur if their farms were to be located on hard-surfaced roads (instead of on gravel and dirt roads as at present). Table XCI shows a classification of the replies by value per acre groups.

TABLE XCI
RELATION OF THE INCREASE IN VALUE PER ACRE OF FARMS ON GRAVEL AND DIRT ROADS, IF LOCATED ON HARD-SURFACED ROADS ^a

CLASS LIMITS	Median value per acre	Number of farms	MEDIAN ESTIMATED INCREASE	
			Amount	Per cent
\$0-\$49	\$30.83	91	\$12.12	39.3
50-99	68.00	58	16.80	24.7
100-149	120.00	21	22.86	19.1
150-199	175.00	8	32.50	18.6
200 and more	426.50	15	100.00	23.4
All farms	\$55.20	193	\$15.18	27.5

^a Tennant, *op. cit.*, p. 36.

There is a definite, regular and pronounced tendency for the estimated increases per acre to rise as the estimated value per acre of the farms becomes greater. Thus, at the extremes, farms worth \$30.83 per acre, on the average, when located on dirt or gravel roads were expected to be worth \$12.12 more per acre if located on hard-surfaced roads, while farms averaging \$426.50 per acre were expected to average \$100 per acre more if located on such roads.

Then again, there are inter-reactions between type of road, bulkiness of product, distance from market, type of carrier, and nature of the marketing process. For example: "No farming section of New York is very far from a railroad or from a hard-surfaced road maintained by the state, but nearness to railroad stations and state roads has a more important influence on land values than is true in some states where the principal farm products are less bulky than those of importance here. When milk is hauled every day, the distance to the receiving station is particularly important, for each mile of the distance must be travelled 730 times a year. If a state road is available and a motor truck can be used for practically the whole year, an additional mile or two may not affect profits materially; but, on poor roads, a difference of two miles may mean a difference of a month's working time in the number of hours available for other farm work.

"Good roads or nearness to market are almost equally important to those who are growing fruits and vegetables. When cabbage yields an average of eight tons per acre and the roads are such that hauling costs forty cents per ton per mile, each additional mile from the loading station lessens the profit from that crop about \$3.20 per acre. Nearness to market is also important in that it enables a great number of farmers, especially those who own motor trucks, to transport their produce directly to the city markets, thus saving not only the freight but the usual commission and handling charges, and lessening the losses caused by rough handling or delay."⁴⁹

Method Suggested by Haas.—Conclusions.—The above discussion should put one on guard against the use of crude average formulae with respect to the valuation of rural lands. The epitome of this type of approach is that suggested by Dr. G. C. Haas. Dr. Haas has suggested that the whole problem of equitable assessment can be solved by the application of formulae derived by correlation analysis of sample sales. Applying this method to Blue Earth county, Minnesota, he evolved the following forecasting equation: $X_1 = 57.785 + 1.067 X_2 + .7279 X_3 + .1658 X_4 - 3.422 X_5$, in which X_1 = value per acre; X_2 = 1919 depreciated cost of buildings per acre; X_3 = land classification index; X_4 = productivity of soil index; X_5 = distance to market.⁵⁰

⁴⁹ New York Department of Agriculture and Markets, *Agricultural Statistics for New York State, 1928*, Bulletin 226, May 1929, p. 30.

⁵⁰ Building values are cost of reproduction less depreciation reduced to a per acre basis.

The land classification index shows the type of land of the farm. Lands are divided into four grades, with weights, as follows:

	<i>Weights</i>
Grade 1. Woods—not potentially tillable.. . . .	$\frac{1}{5}$
Grade 2. Woods—potentially tillable	$\frac{1}{2}$
Grade 3. Wild hay land.....	$\frac{3}{4}$
Grade 4. Tillable	1

Thus a farm with 60 per cent tillable, 20 per cent wild hay, 10 per cent tillable woods, and 10 per cent not tillable woods would have an index of 82 calculated as follows.

<i>Grade</i>	<i>Per cent</i>	<i>Weights</i>	<i>Index</i>
1	10	$\frac{1}{5}$	2
2	10	$\frac{1}{2}$	5
3	20	$\frac{3}{4}$	15
4	60	1	60
Land classification index.....			82

The productivity-of-soil index is figured on crop yields. Each crop is considered as of equal weight. The index for each farm is the average ratio of the three to five year average crop yield of the farm to the average crop yield of the county. For example, a farm yielding an average of 65 bu. corn per acre; 55 bu. oats; 18 bu. spring wheat; and 2 tons clover and timothy would have a productivity-of-soil index of 125.80, figured as follows:

States Haas: "The method of appraisal here outlined could be generally used for purposes of assessment. Ordinarily the county would be the unit, although it might be advisable to section the county if it had two or more distinct types of soil, topography, and agriculture. To start with, the first year under the new method the assessors in their regular visits would fill out a schedule much like the one in Appendix A. [This schedule contains blanks for data on classes of land; soil types; number of acres; distance to market; type of road; building dimensions, construction, condition, and costs; and crop yields]. In succeeding years, all the additional information which they would get would be yields during each preceding year, and dimensions and description of new buildings and other improvements. From the assessor's reports, the farms sold within recent years would be selected, and the data on the assessor's schedules for these farms used in a correlation analysis with the recorded sales prices now regularly obtained. This would give an equation which could be applied to all farms in the county. The actual assessing of land values could be done in the office of the State Tax Commission. Once the equation was obtained it would be used year after year simply by correcting it to fit the changes in land values indicated by the sales records. A recalculation of the equation after several years would, however, be desirable so as to make use of the gradually accumulating yield data.

Crop	Average yield per acre	County	Per cent of county
		Average yield per acre	Average yield
Corn, bu.	65	48.23	134 7
Oats, bu.	55	41 26	133.2
Spring wheat, bu.	18	12.53	143 5
Clover and timothy, tons	2	2 18	91 5
Productivity-of-soil index			125.80

After substituting the actual figures of any farm under consideration for the symbols in the formula, it is necessary to make an adjustment if the farm is situated on a state road (add \$21.92 to the value per acre obtained); and also if the farm is situated near the larger urban centers of the county (add \$12.82). The following example illustrates the use of the formula: Farm on state road,—near urban center; with depreciated cost of building value per acre of \$36.24; land classification index, 87; soil productivity index 96.6; and distance to market, 9 miles.

$$X_1 = 57.785 + 1.067 X_2 + .7279 X_3 + .1658 X_4 - 3.4219 X_5$$

$$X_1 = 57.785 + 38.668 + 63.327 + 16.016 - 30.797$$

$$X_1 = 144.999$$

$$21.92 \text{ state road adjustment}$$

$$12.82 \text{ near urban center.}$$

$$X_1 = \$179.739$$

G. C. Haas, "Assessment of Farm Real Estate," *Proceedings of the National Tax Association*, 1923, p. 63 *et seq.*

"There would be some extra expense involved in getting the new system under way. The assessor's work would be heavier the first year. The calculating of the equation the first year would take two or three persons perhaps a month. But once the system was under way, it is doubtful whether it would entail any greater expense. After the first year the work of the local assessors would be simplified and reduced. In the end, therefore, there might be a very little for the assessor to do. He would become a sort of enumerator, all valuations being made by the Tax Commission. Assessments could then be taken entirely out of politics. Farmers would know that their farms were being assessed on a strictly objective, scientific basis, with no possible chance for favoritism or prejudice.

"Using this method, the State Tax Commission could at one stroke attain the 'full and true' value assessment which is so difficult with local assessors making the valuations."⁵¹

In the opinion of the writer, the task of assessment cannot be simplified to the extent believed possible by Haas. Perhaps, the application of an equation such as that described above may be applicable in certain areas where lands are extremely homogeneous, and even then it would be better to use subaverages rather than crude general averages. Moreover, the technique of such statistical valuation has not been sufficiently developed and refined in the laboratory to make public utilization feasible as yet. The writer agrees with Wiecking when he says:

"The opinion may be ventured that studies which attempt to go beyond opinion and judgment and by statistical analysis, determine and measure factors by which farm to farm variations in value may be explained are yet too few in number, too widely scattered as to location, still too dissimilar in methodology, and each has still too much variation remaining unexplained for any very definite conclusions to be drawn."⁵²

One is inclined to add the qualification that rules for the computation of the influence on values of the location factors in the case of rural assessing will probably be much more diverse than is the case in urban assessing, and will be applicable only to the specific areas represented by the data from which the rules have been evolved, to Wiecking's further statement:

"However, despite all the difficulties perhaps some day there may be developed for the guidance of the appraiser 'experience tables' of typical relationships similar to the tables of 'depth influence,' 'corner influence,' 'alley influence,' and so forth, now in every day use among the appraisers of city property."⁵³

⁵¹ *Ibid.*, pp. 80-81.

⁵² Wiecking, *op. cit.*, p. 1016.

⁵³ *Ibid.*, p. 1017.

Forces Conditioning the Development and Present Status of Assessing Techniques

We have seen that modern urban assessing technique began in the larger cities of the country. From central nuclei such as St. Paul, New York and Cleveland, these methods spread to other large cities, and eventually to the smaller cities. While a number of large cities, and a very large proportion of the small cities still lack modern assessing methods, a considerable amount of progress has been made in the urban field. On the other hand, rural assessing technique has made very little advance. In the few states where progress has been made, it is almost entirely due to the activities of the state tax officials.

Why should this be so? Why is urban assessing technique both in practice and theory so much more advanced than rural? The fundamental reason, in the writer's opinion, is the necessity for large scale operations in the case of the cities. Whereas the method of general familiarity results in poor assessing in rural areas, its use in cities of substantial size is practically out of the question. The utter impossibility of the method of general familiarity revealed itself first in the case of the larger cities where the task of assessment, because of the multiplicity and complexity of properties therein, was greatest. Hence, the earlier development of technical assessing in such cities first. However, the establishment of modern assessing methods was somewhat dependent on the personal factor and local conditioning forces. That is why the development did not start in the very largest cities and down to the smaller in absolutely regular fashion. And that is why we do not find assessment efficiency varying today directly with the size of cities in absolutely regular fashion. For example, there are small suburban cities near very large cities in the East which have better assessing systems than some large cities in the South. But on the whole there is a definite tendency for the larger cities to be better assessed than the smaller. And all available evidence points to the conclusion that a very large proportion of the smaller cities have not as yet installed modern assessing systems.

It should be emphasized that technical methods of assessments have not been adopted as widely as technical developments in other fields of government. Although really just as essential to sound civic administration as modern fire-fighting and police equipment, unit-value assessing systems are far more often absent. The reason for this is that whereas modern methods of fighting criminals and fires are welcomed by the public, assessment reform is a type of reform which attracts few ardent supporters and has to face organized minority opposition. Even in those cities which have installed modern methods, partisan politics still play a role, for obviously the assessing department can be made, and often is made, a major cog in a political machine.

As for the rural situation, the central reason why the crude method of general familiarity has persisted, is, to repeat, the absence of large scale operations. Technical administration has made little progress in any field of rural local government,—and for this fundamental reason. Less deep-seated causes may be cited,—the traditionalistic outlook and aversion to new methods of rural communities; the less urgent need for technical assessing in such communities because the method of “general familiarity” is more possible of application than in cities; the inappropriateness of maintaining an adequate technical system of assessment in small communities with limited resources. But all of these factors are either aspects of or secondary effects of this primary factor: the absence of, or demand for, large scale operations.

The Necessity for Differentiating the Urban from the Rural Problem

It is very important to realize the difference in the problem of equitable assessments in urban as compared with rural communities. Not only are the techniques and their stage of development quite different, but also the basic forces conditioning their administration. In some cities, the problem is one of overcoming the inertia of the general public and the opposition of vested interests to the introduction of modern assessing methods. In cities which have already adopted such methods, the problem consists chiefly in preventing or eliminating political manipulation of the assessing department. In rural areas, the chief problems are the overcoming of the deeply rooted traditionalism of local government, and making technical assessment economically feasible.

Summary

With few exceptions, assessment in the United States, both urban and rural, is not equitably administered. Relief and reform of the situation in both cases are difficult matters. It is not easy to accomplish the installation of modern assessing systems in cities, nor to prevent political and personal favoritism in their administration after such have been established. The solution of the rural problem is still more difficult. For here, even the first step, the establishment of the unit value system, is blocked by deep-seated obstacles. Because the method of general familiarity is not entirely inapplicable, because rural communities are adverse to new ideas and methods, and because modern assessing systems are costly to the community unless the number of properties is so large that the overhead costs involved are widely distributed, rural communities simply cannot be expected to take the initiative in installing such modern systems.

CHAPTER XVI

SUGGESTED SOLUTIONS, WITH EMPHASIS ON THE RURAL PROBLEM

Qualifying State Examinations and Other Suggestions for Improvement of the Present System

QUALIFYING EXAMINATIONS.—THE SYSTEM OF KENTUCKY.—Although all fiscal authorities agree that the task of assessment requires special qualifications, almost no attempt has been made in rural areas to secure such assessors. The qualifying state examination has often been suggested to meet the need. This plan has been applied in Kentucky. Before any person can “run for” the office of assessor in Kentucky, he must take a state examination. These examinations are prepared by the State Tax Commission, and given every four years (since 1921) by the county attorneys. The questions asked are described by the law as testing “the applicant’s experience as an assessor, his knowledge of the revenue laws, his knowledge of the geography of the county in which he expects to become a candidate, his knowledge of the industries and property of such county, and his elementary training and business experience to fill the office.”¹ These examinations are forwarded by the county attorneys to the State Tax Commission, which then grades the papers. No certificate of qualification is granted unless a grade of 75 per cent or better is attained.

EVIDENCE REGARDING OPERATION OF THE SYSTEM OF KENTUCKY.—In the Report of the Efficiency Commission of Kentucky (1924), for which E. O. Griffenhagen was director of research and Prof. Jacob Viner special counsel on taxation, the results of the system were described as follows:

“An examination of the tests given to the candidates to ascertain their capacity for the task of assessment and of the answers made to the test questions indicates that the candidates are as a group the best material available for the office. But there are important variations in the quality of the candidates from county to county, and in a number of counties it would be difficult to find any candidates reasonably well equipped for the office. The test under existing circumstances cannot really be directed to the discovery of candidates with the technical knowledge and equipment necessary to a proper assessment of property, but can only be expected to select from the candidates those who give some promise of being able to acquire the special technical knowledge by experience.”²

In other words, a test of fitness as is made in Kentucky, can give no assurance that the fit will apply for the job. Certainly

¹ Carroll’s Kentucky Statutes, Annotated, 1930, as supplemented by Baldwin’s Kentucky Statute Service, 1932, sec. 4042a-11.

² Report of the Efficiency Commission of Kentucky, “The Government of Kentucky,” 1924, Volume I, pp. 254-255.

such evidence as has been examined on assessments in Kentucky does not lead to the conclusion that the plan is working with much success.³

FUNDAMENTAL OBSTACLES TO ALL SUCH PROPOSALS.—The fact of the matter is that only long-term, appointive, well-compensated men can handle the job of assessing well, and that such tenure and compensation are not part of the present scheme of government in rural communities at the present time. Besides, most communities do not care to invest in the equipment necessary for good assessing, such as maps, records, etc. These considerations of expense also face proposals for increase of compensation as a method for attracting better men to the office. And the considerations of the general tone of local governmental personnel face proposals for the attainment of better assessors through appointment rather than election. In order to avoid the economic obstacle, Prof. T. S. Adams had at one time advocated that less frequent assessments be made, and that the money thus saved could be invested in better performance of the function when the assessment year, *e.g.*, every four years, came around.⁴ This proposal has interesting possibilities, especially if accompanied by a policy of vigorous state exhortation. However, it has several disadvantages, *e.g.*, the establishment of a rigid and inflexible time period. Furthermore, it is very doubtful whether it takes into account the average psychology of rural communities. To the mind of Prof. T. S. Adams, it appeared that if assessments were changed from an annual to a quadrennial basis, four times the sum would be spent on the work when done. But in the average rural locality, the plan cannot be counted upon to produce such a response. The task of assessment might not be financed any more adequately, few changes of any kind made in personnel or equipment, the money of the other three years saved, and the change result in more neglect than before.⁵

The County Assessor Plan

Having recognized that it is necessary to have a larger area that the town or township in order to make the program of good rural assessing economically feasible, many investigators have recommended the next largest unit, the county, as the desirable administrative unit of assessment.⁶ It is true that the solution of

³ See Part II, *supra*, pp. 102 and 103

⁴ T. S. Adams, "Method of Securing Efficient Assessments," *Proceedings of the State Conference for Education in the South*, 1913, p. 181.

⁵ In states which have quadrennial or even less frequent assessment, such as Illinois, Indiana, Kansas, Nebraska, North Carolina, South Carolina, Vermont, and Ohio, there is no evidence that a longer assessment interval has had a beneficial effect on the quality of administration.

⁶ See R. T. Compton, *Fiscal Problems of Rural Decline*, Special Report No. 2 of the New York State Tax Commission, 1920, Appendix B, for an extensive collection of reports of tax commissioners and investigators condemning the township unit and recommending the county unit.

the county as a unit of assessment administration would overcome the economic feasibility obstacle, but it appears to the writer that it would not overcome the traditionalism obstacle. For the county is not superior to the town (or township) with respect to administrative efficiency. Indeed, the record of the county with regard to assessment has been even less favorable than that of the smaller units. If the county assessor plan can be made a practicality, *i. e.*, if a well-equipped county assessment office headed by a competent, full-time assessor can be established, the plan would undoubtedly result in improved assessment administration. Whether such technical, specialized, full-time administration is likely to be established in the average American county at the present time without supplemental measures is, in the opinion of the writer, questionable. Such supplemental measures will be considered later on in this report.⁷

Special Administrative Areas for Assessment

A more commendable unit than the county as an area for assessment administration would be a special area specifically suited for the purpose. Dr. Conrad H. Hammar, in his able study of assessment conditions in Missouri states.

"The present counties, varying as they do in size, number of farms and population, cannot by any stretch of imagination be called studiously accurate assessment areas, devised to keep an assessor and his force reasonably busy throughout the year. Just what the proper size of assessment unit is will depend not upon area alone but rather upon a nice balance of area, kinds of property and number of properties."⁸

As proposed by Dr. Hammar for Missouri, the plan includes the establishment of state supervision by district supervisors of the Wisconsin type. Until such time as public sentiment is deemed to be ripe for appointment, the assessors are to be elected by popular vote.

In the opinion of the writer, this proposal is superior to the county assessor plan. It provides a more appropriate administrative area, and coupled with the proposed vigorous policy of supervision should materially improve present assessment conditions.

Vigorous State Supervision

In recent years, state interest in property tax work has been waning rather than increasing, fundamentally because the state property tax has been declining in importance as a state revenue source. A close connection between these two factors is not a necessary one. It is possible to have a high degree of supervision even if

⁷ See pp. 322-323, *infra*.

⁸ C. H. Hammar, *The Accuracy and Flexibility of Rural Real Estate Assessments in Missouri*, Missouri Agricultural Experiment Station Research Bulletin 169, June 1932, p. 66.

the property tax is relatively important as a source of state revenue, although it must be admitted that the psychological effect of the latter situation is adverse. This consideration may be somewhat of an obstacle to the establishment of vigorous supervision, but it is not unsurmountable.

For states considering the adoption of a policy of energetic state supervision, investigation of the methods and results of Wisconsin constitutes the best laboratory test. For Wisconsin is unquestionably the most advanced state in the country with respect to state supervision over local assessments.

THE WISCONSIN SYSTEM OF SUPERVISION—The Wisconsin system of supervision begins with the furnishing of each assessor with clearly written and comprehensive printed instructions on how to proceed (contained in the frequently revised Assessors' Manual prepared by the Tax Commission). He is also furnished with a field book, a real estate blotter, and the assessment roll. The latter is not carried into the field, but is used as the final entry book (which may be thus kept in good, clean condition). The forms provide for a classification of real property (already described, see p. 290 *supra*); and the assessor is urged to collect, compile and analyze sales and other value data in order to apply the unit method of valuation. The supervisor of assessments, through whom the Tax Commission exercises most of its supervision, is a civil service official, appointed by the State Tax Commission. He has come to be a specialist in tax assessment work. It is his duty to give special attention to newly elected assessors; to supervise, assist, guide, and, in general, inspire the assessors to do their best; and to prepare an interdistrict equalization. The work of supervision and equalization, always somewhat related under the philosophy of the Tax Commission-supervision movement, has reached its most refined and advanced stage of integration under the present Wisconsin system: "On the one hand, the supervisor secures much of the information needed for his equalization while directing and assisting the assessor, and, on the other, his equalization work makes him thoroughly familiar with the property of the district so that he can really help the assessor."⁹

The supervisor holds a meeting in each county for the local assessors before their work is to commence. At these meetings a short course in assessment methods is given. The assessors are instructed in the worth and use of field books, maps, classification of land and unit value analysis. Common errors are discussed and methods of prevention recommended. The assessors are given an opportunity to ask questions and to air problems. Values are discussed and standards compared. Sometimes ingenious methods of instruction are employed. For example, a supervisor and his deputies in one district have devised a model farm with a full set

⁹ J. Roy Blough, "Recent Developments in Methods of Real Estate Equalization in Wisconsin," *Journal of Land and Public Utility Economics*, May 1934, p. 148.

of farm buildings and all the other appurtenances which they use as an instrument of visual education at these county meetings.¹⁰

The work of the supervisors is not confined, however, to these county meetings. The supervisors, or one of his deputies, usually spends a day or half a day in the field during the assessing period with small groups of assessors of adjacent districts. Special attention is given to problems of newly elected assessors. Assistance is frequently rendered in the assessment of property which is particularly difficult to appraise, and the supervisor is available at all times to the assessors in his district for consultation and advice.

ANALYSIS OF THE WISCONSIN SYSTEM OF SUPERVISION—The effectiveness of the Wisconsin system depends upon the ability of the assessors, and their co-operativeness with the district supervisors. In the article by Dr. Groves cited above, data on these points have been prepared. A number of counties were chosen as a representative sample, and the assessors were graded by the supervisor. The grades received may be tabulated as follows:

6 Excellent	7 Fair
6 Very good	6 Poor
6 Good	2 Incompetent ¹¹

These ratings coincide quite closely with the results of the ratio tests made in Wisconsin in pointing to the conclusion that the Wisconsin system results in a "fair" grade of assessments on the average with "very good" assessing and "very poor" assessing at the extremes. Dr. Groves emphasizes the fact that many of the assessors received good ratings. The present writer is more inclined to emphasize the fact that the function could be handled much better than it is. Instead of the present "spotliness" of assessment administration in Wisconsin, and the average between "fair" and "good," he would like to see assessment administration uniformly "good" or "excellent." And in his opinion, no property should be assessed by persons characterized (by the supervisor) as follows:

<i>Grade</i>	<i>Remarks</i>
Poor	"A copyist, good-fellow politician; weak in education."
Poor	"Weak; lets taxpayers assess themselves; politician; charity case, i.e. chosen to give an unfortunate person a job."
Poor+	"Weak on education; co-operates all right"
Poor	"Inclined to be weak; plenty of inequalities in his work."
Poor	"Could do a good job; yields to pressure."
Poor+	"Board of review hinders his work"
Incompetent	"Charity case."
Incompetent	"Thirteen years too many; a religious choice; copies and is indifferent." ¹²

¹⁰ H. M. Groves, "Property Tax Institutions in Wisconsin," *Bulletin of the National Tax Association*, Dec. 1933, p. 76.

¹¹ The sample consisted of twenty-one town, ten village, and two city assessors. Two of the seven were graded fair+; and two of the six, poor+.

¹² *Ibid.*, p. 74.

CONCLUSIONS WITH RESPECT TO VIGOROUS SUPERVISION.—The system of vigorous supervision is capable of effecting considerable improvement in assessment but because it operates with a non-technical base, the degree of assessment efficiency attainable is rather limited. If, as Dr. Hammar has suggested, such a policy be linked with provision for full-time assessors covering appropriate administrative districts who are to be eventually appointed by the Tax Commission, a very substantial relief from present assessment ills would be achievable.

Summary

Proposals for improvement of assessment by such methods as qualifying state examinations, appointment rather than election, and lengthening of the assessment time-interval offer some promise for substantial relief and reform, but in the opinion of the writer do not go far enough. The proposal for the county unit of administration might work out if the county were capable of providing the type of administration which the sponsors of the "county assessor plan" envision, but the available evidence indicates that it is doubtful whether the counties will establish such administration without special supplemental measures. The proposal for special administrative areas would provide a more appropriate administrative district and coupled with a vigorous policy of state supervision would undoubtedly materially improve present conditions, especially if the assessors are to be selected by the State Tax Commission.

CHAPTER XVII

THE EXTENSION OF STATE PARTICIPATION IN ASSESSMENTS

The Mandatory Powers of Supervision: Theory and Practice

THEORY.—In the original philosophy of the tax commission-supervision movement, the functions of the state tax commission with respect to assessments were to be chiefly advisory and exhortatory. The powers of removal and reassessment were conceived of as (1) threats to be held over the heads of the local officials to induce ready compliance,—as Prof. Lutz put it, “The assessor accepts the more willingly the advice and leadership of the tax commission when he is fully aware of the iron hand within the velvet glove”—and (2) as a remedy for unusually incompetent or fraudulent assessing.¹ This is the conception of the mandatory powers of supervision which has found its way into the statutes of many states.²

¹ H. L. Lutz, “The State Tax Commission and The Property Tax,” *Annals of the American Academy of Political and Social Science*, Vol. XCV, May 1921, p. 279.

² The power of reassessment is possessed by the state tax officials in some twenty-seven states: Alabama, Arkansas, Idaho, Indiana, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, South Carolina, South Dakota, Utah, Washington, West Virginia, and Wisconsin. Amongst these, the power is limited in New York by the provision that the Tax Commission may not order a reassessment directly, but must apply to a justice of the Supreme Court of the judicial district within which the tax district is situated for an order requiring the assessor or county board of equalization to show cause why such a reassessment should not be made. In Wisconsin, the power is limited to exercise only upon petition of the owners of 5 per cent or more of the property of the district. Besides these states, in Massachusetts, the Tax Commissioner may recommend that a reassessment be made, but is not empowered to order it. And in California, the State Board of Equalization may assist in a reassessment when requested to do so by local officials of the tax district concerned.

There are two general forms of the power: (a) the power to order the local officials to reassess; (b) the power to reassess with state appointed officials. In about a half-dozen states, Idaho, Illinois, Iowa, New York, Ohio and South Dakota, the power is limited to ordering the local assessors to reassess. In Maine, New Hampshire and New Jersey, the law provides that the reassessment be made first by the local assessors, and, if still unsatisfactory by officials chosen by the state tax administrative agency for the work. In the case of practically all these states, the reassessment is to be treated as an original assessment and reviewed and equalized in the usual manner. The same is true of most of the states where the reassessment may be made by state-appointed officers. However, in the case of a few states, such as Indiana, Michigan, Minnesota, Nebraska, South Dakota and Utah, no review by local officials is to be made in such cases, review of complaints being made instead by the state administrative tax agency. In Michigan, the greatest precaution has been taken to prevent local officials from vitiating the reassessment by the provision that the reassessment is to stand for three years.

The power to institute removal proceedings is specifically granted by the statutes of Alabama, Arizona, Arkansas, California, Colorado, Idaho, Iowa,

ACTUAL PRACTICE.—There are a few states where the theoretical concept of the mandatory powers outlined above, namely, general preventative threat and remedy for exceptionally poor assessing, has been applied in practice. Ordinarily, however, theory and practice have been quite diverse.

The Power of Removal.—With respect to the power of removal, this power has been so seldom exercised throughout the country that it has come to be of negligible importance. In response to inquiry by the writer as to the use of the removal power, the state tax officials usually replied that it had never, or at most very rarely, been invoked. In no case has extensive use been made of it, and in a number of instances the state officials were not even aware that they possessed any such power.

What are some of the reasons for the rareness of the exercise of the power of removal? In the first place, it should be observed that in only a very few cases has the power been granted by the legislature in full. In the vast majority of the states, the state tax officials are not permitted to remove local officials directly, but only to *institute* removal proceedings in the *courts*. The procedure resolves itself in this event to a contest between state and locality, and one in which the state is ordinarily not the favorite, since a local court is designated to decide on the case in most statutes. In a number of the states, charges are to be preferred to the Governor. In such states, the Governor would have to turn his attention from affairs of state to give the time necessary to a fair hearing. Moreover, in either event, there is always the reluctance to use such a drastic power, involving stigma on individuals and the possibility of friction between state and locality. Because of these considerations the power has been invoked very sparingly, and then not for poor work, but for fraud or similar serious violations of law.

As for the threat aspect of the power of removal, the potency of a threat depends upon the probability of its being made good, which in turn depends upon the extent of actual application of penalties to offenders. For if the penalty has never or so seldom been invoked as to make it highly improbable that it will be invoked, no one will fear the penalty. And if the threat itself is

Kentucky, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, North Dakota, South Carolina, South Dakota, Utah, West Virginia, Washington, Wisconsin and Wyoming. In Kansas, Nebraska, Indiana and Maryland, direct administrative removal is authorized in certain cases. In most of the states of the first group mentioned, removal is lodged in the local courts. However, in Colorado, Michigan, Minnesota and South Carolina, the charges are to be preferred to the Governor. In New Jersey, it is the Supreme Court which is to make the decision. In addition to these states where the statutes are quite specific on the matter of removal, in certain states, namely, Connecticut, Illinois, Maine, Massachusetts, New Hampshire, New Mexico, North Carolina, Ohio and Oregon, the power to institute removal proceedings is not specifically granted but the state tax officials are authorized to enforce compliance of the local officials with the law and institute prosecution proceedings for the violation thereof.

rarely invoked, and the actual power almost never, as is here the case (the state tax officials not only do not try to remove assessors, they do not even threaten to do so), then the power becomes a "dead-letter" indeed.

The Power of Reassessment.—With respect to the reassessment power, there have been a number of developments. The orthodox doubleheaded concept of general threat and remedy for exceptionally bad cases has survived in a few states, for example, Wisconsin and Minnesota. In the vast majority of the states, however, the reassessment power has gone along the same road as the removal power. Most of the states have made such little use of it that it has ceased to be of practical significance. On the other hand, some states have supplied the reassessment power on a much wider scale than contemplated in the orthodox theory. In these states, the concept of the threat was entirely dropped, and the power used on a wholesale scale as a remedy. Thus conceived, the co-operation of local officials was sought, and eventually gained. In the most recent reassessment programs the local assessors work directly under the supervision of engineers or appraisers of the staff of the Tax Commission.

Extensive State Reassessment Programs

MICHIGAN.—*Events Leading up to Reassessment Program.*—One of the first instances of the "wholesale remedy" type of reassessment policy occurred in Michigan in the second decade of the present century. Practically the entire state was systematically reassessed in the period from 1911 to about 1918. The events leading up to the inauguration of this policy, and the methods used, have been well described by Mr. Orlando F. Barnes, Chairman of the State Board of Assessors at the time. In order to retain the spirit of the undertaking, the language used by Mr. Barnes, as of 1917, is quoted verbatim.

"During the decade preceding 1911 an agitation for more equitable taxation had been in progress in Michigan, with the result that the system of taxing public utilities had been changed from specific taxation to ad valorem taxation, the assessment of the properties to be at actual cash value and the rate of taxation the average rate paid by the general properties of the state. The mining properties, also, had been given consideration, and in 1911 were examined and appraised for assessment purposes on a new method at actual cash value by a mining engineer of national reputation.

"Prior to the agitation for more equitable taxation which resulted in these important changes, the great majority of assessing officers had by common consent, as it were, ceased to follow the constitution and assess property at its cash value. This long continued practice was not abandoned when public utility properties were placed on the ad valorem basis and mining property assessed at the values reported by the expert appraiser, and there

were many objections when demands were made for more just assessment of general properties. It was unreasonable, however, for those advocating equal taxation to take any other position than that all property should be assessed on the same basis. It was well known to members of the legislature, assessing officers, and taxpayers familiar with assessment conditions that because of under cash value assessment of general property the resulting average rate was a dishonest average rate when applied to public utility corporations, which justice demanded should be corrected. There was the feeling, also, that while the courts had sustained the *ad valorem* method of taxing public utilities as constitutional they had not sustained and probably would not sustain an average rate where the assessment of the properties on which it was based was admittedly under value. . . . There was no way by which the situation could be remedied except by reform in the assessment itself and the legislature of 1911 undertook such reform."³

Wide powers were thus granted to the State Board of Tax Commissioners in 1911 and the reassessments began with a series of county reviews in that year. During the next few years, more counties were reassessed, and eventually the program became one of orderly reassessment of the entire state. By 1917, for example, 70 of the 83 counties had been reassessed.

Methods Employed in the Work.—The methods employed in the reassessment program have been described by Mr. Barnes. Again the language is as of 1917.

"The commission early adopted the county as the unit in doing the work. It does not select districts in various counties and reassess them, but reviews every district not up to cash value in one county at the same time, although work on that plan may be going on in several counties simultaneously. The field force of the commission is graded as foremen, expert examiners appraising particular lines only, skilled examiners for valuing general properties, and field clerks who assist in getting information and keep the record of the same.

"When reassessment work is determined upon in any county some one is selected from the foremen who has had experience in valuing properties similar to those in the county to be reassessed. He is given charge of the work and is responsible only to the commissioners. A force of field examiners and field clerks are placed under him. Field clerks are necessary in cities where buildings must be visited, measurements taken, maps carried, and a large amount of information collected. The assessment officers of the county are visited, their co-operation solicited, and their assessment rolls taken charge of by the foreman. Meanwhile clerks prepare from the assessment rolls field books on which are entered the legal description, location, and ownership of every piece of

³ O. F. Barnes, "How Can Reassessment Statutes Be Administered without Causing a Political Upheaval?" *Proceedings of the National Tax Association*, Eleventh Conference, 1917, p. 298.

property in the assessing district. . . . While the field books are being prepared, the foreman and examiner are studying conditions affecting values; transfers of property are compiled and the actual consideration for the same verified where possible; prices at which property is offered for sale are investigated; rents, leases, and insurance studied; and business men and taxpayers interviewed. As indicating how important this feature of the work is considered, a force of 30 examiners worked for six months in the city of Detroit collecting information before undertaking a single reassessment.

"Field books completed and information gathered, the foreman assigns territory to each of the examiners under him, and field clerks where necessary. In his work the examiner must visit every piece of property on which he places a value, he must enter upon the field books a description of the same sufficiently complete to enable a commissioner at the final review to pass intelligently upon any appeal made from the valuation recommended by the examiners. He is also expected to interview the property owner himself, wherever that is possible, to verify the information obtained. . . . If the supervisor is not hostile, he is conferred with whenever there is doubt in the mind of the examiner as to the value of a property or as to the correctness of information given. Especially important also is it that the examiners confer frequently with each other to insure uniformity in their work. If the district assessed is a commercial center, experts are sent to examine mercantile property, and other experts to do the same with regard to industrial and public utility property.

* * *

"On completion of the property examinations and their approval by the foreman, a public review is held. This review is the opportunity for convincing the taxpayer that all have been treated alike. It is not sufficient simply to publish notice of the review in the newspapers, but notices are mailed to every property owner. The review is generally opened with a talk by a commissioner, telling why the reassessment has been made, how it will affect taxpayers, what constitutes cash value and how it is determined; after which each taxpayer is given the opportunity to ascertain the assessment of his property and that of his neighbors, and in case he believes it assessed at more than its value, he is informed that he can appeal to the commissioners themselves, one of whom must be present at every review."⁴

Attitude of the Public and of the Local Assessors.—The attitude of the public and of the local assessing officers toward state reassessment as the work progressed was described by Mr. Barnes as follows:

"It is pleasing to the tax commissioners of Michigan and possibly may be reassuring to those contemplating reassessment work

⁴ O. F. Barnes, *loc. cit.*, pp. 313-315.

in other states to conclude this paper with a reference to the change in public sentiment and in the attitude of taxpayers and assessing officers that has come about as the work has progressed. In the beginning, the appearance of a representative of the commission in an assessing district for the avowed purpose of reviewing assessments aroused antagonism to the examiner personally and criticism of the tax commission as an arbitrary body roaming about the state and needlessly interfering with local conditions. Assessing officers, influenced by the feeling of their constituents, were afraid to co-operate with the examiner even to the extent of associating with him.

"The first reviews were tumultuous affairs, devoted to denunciation of the commission more than to an investigation of the accuracy of its work. As the reassessment progressed and the plan of educating taxpayers and assessors was developed; as taxpayers discovered that in three cases out of four they actually profited financially out of reassessment; as reassessed counties discovered that they had been protected by the tax commission in state equalization; as knowledge that the work was to be statewide and not limited to individual counties became general, sentiment changed. The individual taxpayer, educated as to cash value and convinced that all would be treated alike, lost his fear of an increase in taxation because of an increase in assessments. Supervisors changed their attitude and co-operated more and more with examiners in field work and sustained their valuations at reviews. The reviews themselves changed character and bitterness disappeared, counties that had not been reassessed began petitioning the tax commission to begin work in those counties, and boards of supervisors in numerous cases indicated their satisfaction with work done in the counties by passing resolution commendatory of the tax commission, its field men and its work."

Appraisal of Results.—Subsequent Events.—Newton and Hedrick, in their study of assessments in Michigan, make the following comments on the reassessment activity of the Michigan State Board of Tax Commissioners:

"The history of American taxation contains very few examples of such continuing zeal and singleness of purpose as has been shown by the Michigan Tax Commission in carrying out its promise to re-assess the State. That this work has been productive of enormous benefit to Michigan's taxpayers can scarcely be questioned."

In 1921, the commission was required to make the state equalization annually instead of twice in five years as had been the law prior to this date. The reassessment of the state had been quite completed, and the commission concentrated its energies on equalization work. It expressed the hope at this time that the annual

^a *Ibid.*, pp. 315-316.

^b Newton and Hedrick, *op. cit.*, p. 30.

equalization law be repealed, so that it could reassess some of the counties which had been first reassessed, the assessed valuations of which had become somewhat antiquated.⁷ Gradually, however, the interest of the Commission turned to other matters, and in recent years reassessments have rarely been made.

NEW HAMPSHIRE.—A somewhat similar policy of systematic reassessment has been undertaken in New Hampshire, and although reassessments have not been so frequent in recent years, is still in force. In answer to an inquiry by the writer, the following information was received:

"We are continually reassessing upon complaint and have a regular plan of making general reassessments of taxing districts. Depending on other departmental work that is going on we may get over from ten to twenty of these each year. Usually the districts selected for revaluation are upon application of local assessors and in practically every case the reassessing is done in cooperation with the local board. It would be impossible to tell you how many reassessments have been made since the Tax Commission was created in 1911. Nearly every taxing district in the state has been gone over by the Commission and some of them several times."⁸

And in reply to a request for further detail:

"Our staff of appraisers is not a large one. We have one man who works for the commission the year round but we have three or four other men specially qualified to do this work either by reason of experience as assessors themselves or from a practical knowledge of values.

"Reassessments have not been made quite so freely since 1931. There were five reassessments completed in 1932, the same number in 1933 and we have this year completely assessed three towns and one other is in process.

"In your letter you ask if we have encountered any resentment toward the policy on the part of the populace. This policy has met with general approval. Of course there are here and there cases where individuals complain bitterly but these are usually cases where the appraisals have raised the valuations on property owners materially. The people as a whole realize the necessity and advantage of having these reappraisals made."⁹

The policy of the New Hampshire Tax Commission with respect to cooperative reassessment was praised by the Institute for Gov-

⁷ Newton and Hedrick, *op. cit.*, p. 37.

⁸ Letter from Mr. E. C. Hiist, Secretary of the State Tax Commission of New Hampshire, under date of July 11, 1934.

⁹ Letter from Mr. John B. Maiston, Assistant, State Tax Commission of New Hampshire under date of Sept. 4, 1934. The wording of the query referred to was: "In the light of the strong feeling for local autonomy found in New England, it is rather surprising that reassessments are called for by the local officials. Have you encountered any resentment toward the policy on the part of the populace?"

ernment Research of the Brookings Institution in its recent survey of governmental administration in New Hampshire. However, one aspect of this policy received the following criticism:

"Unfortunately this reappraisal work does not result under present conditions in records which can be kept up-to-date. The reappraisals are made by expert appraisers who make such use of sales data as they can, but the results of the appraisals are not recorded on land or tax maps and in unit sales values which can be revised and used as standards year after year."¹⁰

NORTH CAROLINA.—Instead of reassessing the state over a long period of years as was done in the case of Michigan and New Hampshire, North Carolina was reassessed under the direction of state officials in *one* extensive state-wide reassessment. In 1919, a state-wide revaluation was authorized by the General Assembly and was carried out under the direction of the State Tax Commission through ten district supervisors. The work was begun on May 1, 1919, and completed in August of 1920. The taxable value of all property in the state was increased from \$1,100,000,000 to \$3,160,000,000, or almost trebled. Real estate was increased from \$422,000,000 to \$1,982,000,000. One million acres of land which had not been listed previously were discovered and placed in the tax books. However, when values tumbled in 1920 and 1921, the work of the state was largely nullified by the shifts and changes of values caused by that depression.¹¹

SUMMARY OF THE EXPERIENCES OF MICHIGAN, NEW HAMPSHIRE AND NORTH CAROLINA.—The experiences of Michigan, New Hampshire and North Carolina with extensive reassessment programs teach a number of lessons. First, they show that much good may be accomplished by such programs. Properties which before had been escaping taxation entirely, because of the inefficiency of local administration, were discovered and placed on the rolls, thus easing the burden on the general mass of property. Discriminations and inequalities were lessened and the distribution of the tax made generally more equitable. Secondly, these experiences demonstrate that although there may be local opposition in the beginning, that eventually the localities and the local assessors have come to regard such state assistance as desirable, and to welcome it. Thirdly, these experiences point to the most important flaw in periodic state revaluations—the lack of permanency in the improvement achieved. In North Carolina, the drastic value changes of 1920 quickly vitiated the results. In Michigan and New Hampshire, local administration has failed to maintain equitable assessments.

¹⁰ Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State, County, and Town Governments of New Hampshire, 1932*, p. 525.

¹¹ P. V. Betters, Editor, *State Centralization in North Carolina*. Institute for Government Research of the Brookings Institution, *Studies in Administration* No. 26, 1932, p. 123 *et seq*

RECENT REASSESSMENT PROGRAMS.—The fault of impermanency has been recognized and attempts have been made to surmount it in the states which have more recently embarked upon extensive reassessment programs. In Oregon and Utah, the state tax officials have attempted, while making the reassessments, to "break in" the local officials in the utilization of modern assessment methods. In these states, the state tax commissions have not only made revaluations, but have also attempted to install better assessing systems as well. This attention in recent reassessment programs to systems as well as to values has been confined thus far mainly to urban real property, where (as previously explained) the greatest advances in assessing technique have been made.

OREGON.—In 1929, the Oregon Tax Commission was granted wide powers of reassessment, and soon thereafter embarked upon a vigorous policy of extensive state reassessment. The scope of these reassessment activities was confined largely to the buildings of the state, and for this purpose a manual containing factors of value was prepared and distributed. The manual contained comprehensive material on the appraisal of buildings, square foot unit costs for almost every conceivable type of building to be found in the state, graphs and charts for ready computation and application to specific properties. This manual has been revised so as to permit the assessors to keep their valuations up-to-date. While assisting the local assessors to make reassessments under its direction, the State Tax Commission endeavored to induce them to use improved record systems. At the present time, the greater part of the business buildings, a large part of the residences and a few of the farm properties have been reassessed in this manner.¹²

Here also, the policy of the Tax Commission has become well received by the local officials. In answer to an inquiry concerning the mandatory powers of the Commission, the writer was informed as follows:

"In this connection, we might advise we have had only the heartiest co-operation from the assessors; in fact, there has been almost a tendency to pass local problems up to the state tax commission for direct assessment, both as to single and group properties."¹³

UTAH.—The present State Tax Commission was established in 1931, and almost immediately started forth upon a policy of materially bettering assessments throughout the state. The reassessment policy of Utah was described by Mr. R. E. Hammond, Commissioner of the Utah Tax Commission, at the 1933 Conference of the National Tax Association, as follows:

"It was the original plan of the commission to call upon the legislature for an appropriation to make a complete reappraisal

¹² Letters from Mr. John H. Carlin, Commissioner, State Tax Commission of Utah, under dates of July 18, 1934 and February 16, 1935.

¹³ Letter from Mr. John H. Carlin, Commissioner, State Tax Commission of Oregon, under date of July 18, 1934.

of the state within a two-year period, but the numerous calls upon that body for revenue for relief of unemployment and the difficulty in securing revenue made this action on the part of the tax commission seem inadvisable. We therefore decided to go ahead with out plans for reappraising the state upon a modest scale, and to work it out over a period of years. The commission has developed means of appraising buildings based largely upon the work of Mr. John A. Zangerle, who has been a pioneer in this field. The commission has a corps of capable engineers who have had experience in building construction. These men are cooperating with county assessors in making assessments of buildings upon a uniform basis. By the time that the assessment books are made up next year, it is anticipated that we shall have completed the reappraisal of buildings in ten counties out of the twenty-nine in the state. In addition to this, we have completed for next year's assessment, complete reappraisal of the buildings in Ogden City, next to the largest city in the state. The results of these reappraisals have been very interesting to us. In one small county it was found that the net result of the reappraisal brought about an increase of approximately seventeen per cent in the total assessed valuation of all buildings in the county. But the unique thing about the result is the fact that while there was this increase in the total, there were more buildings that were reduced in value than increased. This shows quite clearly that the finer buildings as a rule were under-assessed and the poorer structures were over-assessed; illustrating an age-old weakness of the assessor.

* * *

“While the law gives the commission ample authority to make reassessments under its own initiative and without consideration of the local assessor or county board of equalization, the commission has hesitated to operate in an arbitrary manner, and has conducted its reassessment in cooperation with county officials. After the first two or three counties were reassessed, we had so many requests from assessors and county boards of equalization in other counties to make reassessments, that we have not been able to fulfill all of the demands which were made¹⁴

Installation of Systems Under the Supervision Powers

Before going further into the problem of the maintenance of good assessing, it should be pointed out that what Oregon and Utah have attempted to do through the exercise of the reassessment power in a short time, has been attempted by other states through the method of exhortation, and in other ways. For example, a number of the tax commissions have been urging the

¹⁴ R. E. Hammond, “Rebuilding Utah’s Tax System,” *Proceedings of the National Tax Association*, 1933, pp. 72-73.

adoption of technical methods of assessing for many years upon the localities; and in some states, for example, Connecticut, the smaller cities have made the change sooner than would otherwise have been the case had the Tax Commission not been so energetic. Again, in Minnesota, the use of appraisal cards was made mandatory in 1928, and although many of the rural communities have not made use of these cards, much good has been accomplished.¹⁵ In Wisconsin it was the urban communities, namely, the cities and villages, which did not install and use the appraisal cards prescribed and provided by the Tax Commission since 1925, the rural field books being apparently more extensively utilized. Recently, however, the State Tax Commission was able to have a project authorized by the Civil Works Administration for the installation of these card systems in all of the cities and villages of the state.¹⁶

The Maintenance of Good Assessment

The *installation* of technical systems of assessment in the localities may be accelerated by the state through exhortation, vigorous use of the powers of supervision, or under the reassessment power. The first method means slow and uneven progress. The second method is superior to it, but the best method would appear to be the third, wherein state-officials "break in" the local assessors while making a thorough reassessment. The question of *maintenance* of these improved methods by the localities arises in all three cases; and probably in its most acute form in the third, because these improved methods have been largely imposed from without, and the jump to them has been made so quickly. One possible method of maintaining good assessment is by the continued use of the reassessment power. Such a practice may, however, result in a tendency for local administration to develop an attitude of dependence upon the state and a decrease in local efficiency and alertness.¹⁷ And, moreover, the system of periodic state reassessment means frequent losses with sporadic rectification, hardly a commendable execution of a function which should be smoothly and continuously performed. Hence, the system of periodic reassessment for the maintenance of good assessing cannot be recommended.

¹⁵ See *Thirteenth Biennial Report of the Minnesota Tax Commission*, 1932, p. 25.

¹⁶ C. D. Rosa, "Civil Works Administration Assistance in Wisconsin Property Tax Assessment," *Bulletin of the National Tax Association*, Feb. 1934, p. 130 *et seq.*

¹⁷ Such was found to be the case in some localities in Michigan, during the time that the vigorous reassessment policy was in operation. R. W. Newton and W. O. Hedrick, *Farm Real Estate Assessment Practices in Michigan*, Michigan Agricultural Experiment Station Special Bulletin No. 172, Feb. 1928, p. 37.

Maintenance of Good Assessing by Conditioned State Aid

Another method of maintaining high standards, once they have been established, is by the use of the mechanism of conditioned state aid. This mechanism is superior to reassessment: it involves less friction, since it induces rather than forces good work, and may be applied in continuous, smooth fashion rather than jerkily and sporadically. The mechanism could be used in the field of assessments as it has been used in other fields of government, the state granting or matching money for assessment administration if certain standards, such as the proper maintenance of maps, sales records, and a minimum degree of inequality (as tested by the coefficient of dispersion) were met.

In order to avoid unnecessary duplication of overhead costs, it would be advisable to grant such aid to the counties rather than to the towns and cities. Hence, it would be wise to transfer the function of assessment to the counties in connection with the establishment of such a policy of state aid.

Summary

Extensive state reassessment programs have produced good results. Local assessors, often antagonistic at the beginning, have come to welcome state assistance in carrying out the difficult task which has been assigned to them, and the attitude of the general public has similarly become favorable. The chief flaw in extensive state reassessment programs has been the impermanency of the results. Local officials have not "kept up the good work." In recent reassessment programs, those of Oregon and Utah, attention has been given to the establishment of systems as well as of values. This is a step forward. If provision were made, in addition, for maintenance of such systems, by the device of conditioned state aid (orthodox type, money allocated for assessment purposes conditioned upon satisfactory performance of assessing), there is no doubt but that substantial improvement in assessment conditions would be realized. Whether this is the best program for assessment reform is another question, which the next chapter will seek to answer.

CHAPTER XVIII

THOROUGHGOING REFORMS

A state reassessment and installation of adequate systems in each of the counties, to which the function of assessing would be transferred, coupled with a policy of vigorous state supervision and control utilizing the mechanism of conditioned state aid for the maintenance of high standards, would substantially improve assessment conditions. While this three-part program provides for the retention of the function of assessment in the hands of traditionally inexperienced local administration, every effort is made toward making such administration more expert. Unit value systems are to be installed, and local administration of them given a good start under state tutelage; the area of administration is to be enlarged so as to make the costs of the full-time personnel and the maps, records, and other equipment necessary to good assessing economically feasible. Furthermore, the state is to extend aid for the maintenance of good assessment, and to make compliance with specified minimum standards necessary prerequisites to such monetary assistance. In brief, this plan would seem to be the best that can be devised on the assumption that it is desirable to retain assessment as a local function of government. The other alternative is to provide for outright state administration. Let us turn to an analysis of the general considerations involved in choosing between the two.

The Sanctity of Local Self-Government

THE ARGUMENT.—It has been urged that the proposal for state administration of assessments is alien to our established institution of local self-government. For example, Prof. H. L. Lutz in *The State Tax Commission* declared:

“The general conclusion which has been reached from this study has been that *state* control of *local* administration has been beneficial, and should be extended in some directions even further than at present, in order to permit the correction of certain defects still existing. Complete state assumption of the functions of local administration is, however, quite another matter and it is doubtful if this extension of state activities can be justified. For the sake of local self-government, and even of democracy itself, can the state afford to deprive the local units of all responsibility in a field so important for the whole people as that of taxation?”¹

CRITICAL ANALYSIS.—There is a rational basis for the institution of local self-government, but there is no ground for urging this basis as an objection to state administration of the function of assessment. The essential philosophical basis for local self-government is that it allows local groups to carry on activities which are

¹H. L. Lutz, *op. cit.*, p. 637.

peculiarly suited to their own desires. Centralization may result in the imposition of policies, which, while representative of public desires in an average sense, are not so specifically appropriate to varying local tastes or dissimilar local conditions. Local self-government may therefore be superior to a high degree of centralization with respect to *policy determination*. Insofar as *administrative efficiency* is concerned, however, it is almost universally conceded that local administration has proven incompetent to deal with many modern technological problems. This situation has been met by state supervision, in practically every sphere of local government. Indeed, in recent years, there has been a tendency in some quarters toward recommendation of complete state assumption of some local functions. But any suggestion for a transfer of a local function to the state should take into account that with the gain in administrative efficiency may go a loss in psychological adjustment of the desires of the people with respect to government. But there is absolutely no loss to be taken into account as concerns the transfer of the function of assessment, because the factor of policy determination is entirely absent. The assessment of property involves neither the amount of public contributions nor the nature nor magnitude of the various types of government expenditures. The localities would still be free to determine how much revenue they wish to raise, and where, when and how they wish to spend it. Only insofar as illegitimate and undesirable favoritism is concerned can it be said that a transfer of the function of assessment would limit local freedom of action. This point cannot be emphasized too much. A transfer of the function of assessment would involve no loss of local liberty with respect to the amount or nature of public functions. Prof. Lutz uses the term *taxation* in his argument. But the issue is not one of *taxation*; it is one of *assessment*. The former involves policy determination; the latter does not. Since the question is one of *assessment*, is not his argument inapplicable?

IMPLICATIONS.—Because of the purely administrative character of assessment, the decision as to the transfer of this function should be made on grounds of administrative efficiency. Limiting the discussion, then, to administrative efficiency, two factors, the effect of which are sometimes urged as arguments for local administration and against state administration: (a) "local familiarity;" (b) "bureaucracy" will now be analyzed.

The Local Familiarity Argument

THE ARGUMENT.—It is sometimes urged that the function of assessment be retained as a local function because officials who are residents of a district have greater familiarity with local values and conditions than officers of the state.

CRITICAL ANALYSIS.—The argument that local people were best fitted to assess local properties was undoubtedly valid many years

ago, for at that time the system of assessing itself was largely one of "general familiarity." With the development of modern unit value assessing techniques, and the emergence of technical, civil service state tax administration, this argument has lost much of its cogency. It has been recently analyzed by Griffenhagen and Associates, well-known advisers to governments on problems of administration, as follows:

"The argument that assessments should be made by local residents who are familiar with the local properties and conditions seems to have considerable force, but on analysis this force tends to disappear. A local resident has friends to favor and enemies to hurt, as well as future advantages for himself that he can gain by seeking favors from some individuals. Such a one can hardly be blamed if he permits his judgment to be warped by such considerations. He can hardly fail to do so whether he is conscious of it or not. If he has to depend on the votes of the electors whose property he is assessing, the possibility that bias will creep in to some of the assessments becomes almost a certainty. As a matter of fact, residence in the territory assessed should almost be considered a disqualification. Disinterestedness in the assessor should be an important qualification.

"Furthermore, a requirement of local residence narrows the field of choice and reduces the chances of securing trained and qualified assessors throughout the state. A compact force of specialists under common direction offers the best hope for a solution of this difficult problem of effective assessment."²

Prof. Simeon E. Leland's viewpoint on this argument is similar:

"The objection is urged that state assessments would mean the loss of local knowledge which is essential to the successful operation of the property tax, but the demand for such information from local officials is tantamount to a request for no administration whatever. The employment of approved assessment techniques by state-appointed civil service officials is vastly superior to the hiring of locally-elected officers with their groups of friends and political associates, all of whom are remembered on assessment day. Card files with appropriate information at the disposal of state officers will soon displace the scattered, miscellaneous information of part-time local assessors. An impersonal assessment force, such as the state would provide, could easily improve existing assessments."³

APPLICATION TO ALTERNATIVES UNDER CONSIDERATION.—The alternatives considered in these two citations are: either the present system or state administration. Both the plans which are being considered in this chapter include qualifications for assessors and approved technical methods. The case is not so strongly weighted in favor of state administration if the proposed vastly improved

² Griffenhagen and Associates, *Report made to the Special Legislative Committee on Organization and Revenue, Wyoming, 1933*, Vol. I, p. 499.

³ S. E. Leland, "The Integration of Governments and Fiscal Systems," *The Tax Magazine*, April 1931, p. 154.

type of local assessment which has been suggested be considered as the alternative. However, these analyses point to the conclusion that the "local familiarity argument" does not constitute a valid objection to state administration. After all, there is no reason why a competent full-time state official should not be able to make himself thoroughly familiar with the values and properties of the tax district to which he is assigned. On the other hand, under the state administration plan, the possibility of favoritism is minimized. Moreover, on technical appraisal grounds, a narrow local viewpoint is a liability rather than an asset. Mr. Philip W. Kniskern, well-known authority on appraising, has observed:

"The appraiser who has the opportunity to work in and study cities other than his own has a great advantage over the purely local man. The same benefits may be accomplished if one's own working territory is narrow, provided his study covers a wide field. The local man loses perspective and too, many forces that are acting right under his nose go unnoticed as a result of constant contact and familiarity. We will probably not all readily admit that we do not know the relative importance and direction of all the forces acting in our section, but we agree that the weather bureau with its widely scattered sources of information knows much more about where a storm will go than does the man whose roof is about to be blown off. Summing it all up, is not the weather bureau's system the only reliable one?

"The expert, highly trained appraiser who goes into the strange city can make as accurate, if not more accurate valuations, than many of the local men. It will take him a deal more time to develop all of the necessary statistical information but he is not biased, is open-minded, has a broader viewpoint, a perspective, and judgment with no prejudice. Many manifestations are new to him that are forgotten and overlooked by the local man

"The appraiser who studies many cities acquires a perspective of viewpoint that is intensely valuable. Furthermore, he will develop a store of valuable comparative information that will guide him around many pitfalls not otherwise evident to him. The man who confines himself to one limited territory must always be narrow in his viewpoint."⁴

CONCLUSION.—Analysis of the factor of local familiarity leads one to the conclusion that, instead of being an asset to the general argument for local rather than state administration, it may even be a liability; and conversely that, instead of lack of local familiarity being an objection to state administration, it may even be a point in its favor, since it carries with it absence of narrow preconception as to values, and greater impartiality.

⁴ Philip W. Kniskern, *Real Estate Appraisal and Valuation*, 1933, pp. 196-197.

Bureaucracy

THE ARGUMENT—Another type of objection which has been urged against state administration of assessment is that it would result in arbitrary bureaucracy—in “office” administration, and neglect of individual differences.

CRITICAL ANALYSIS.—Bureaucracy is conceived of by some as a correlative by-product of centralization, but there is no justification for regarding the connection between the two as unavoidable or inevitable. The problem is one of competency and adequacy of organization. A central government dealing in large scale operations need not necessarily be more arbitrary or more neglectful of cases which require individual attention than a small local unit. With respect to the present situation in assessment, taking a very pertinent example, roll-copying and horizontal changes constitute extremely arbitrary administration and serious abuse of power. On the other hand, a system of state administration based on impartial, objective methods of valuation, with adequate provision for review of complaints by persons most competent to pass judgment upon them, might very conceivably result in virtual absence of these evils. Hence, the emergence of bureaucracy with respect to the two specific choices considered depends fundamentally upon the way the reforms are handled.

There is, however, no question that the assumption of the function of assessment by a state of the size of New York presents a formidable task. Should this plan be adopted in New York, the state should proceed carefully and without undue haste. The transfer need not be made for the whole state all at once. For example, the assessment administration of only the rural areas and the smaller cities could be taken over the first few years. This would relieve the worst portion of the situation here in New York, and would give the state a chance to handle the whole matter more carefully than by attempting to reorganize the assessments of the entire state at one fell swoop.

As for the long-range aspect of adequacy of organization, the position of assessor could be developed into a regular profession. Specialized courses could be given in the universities including such subjects as appraising, engineering, architecture, rural and urban land economics, etc. Arbitrary “office” decisions need not develop if provision is made for capable subordinate administrators.

The Best Solution: State Administration

With “local familiarity” seen to be more of a disadvantage than an advantage under present conditions, and “bureaucracy” not an inherent characteristic of centralized administration but avoidable by competent, adequate organization, the chief ground for the recommendation of the complex system of state reassessment and installation of systems, vigorous state supervision, and change of assessment unit, is that it preserves local administration. But we

have already seen that the transfer of this function to the state would involve no legitimate loss of local self-government. With the objections to state administration thus seen as of insubstantial weight, the positive advantages of this plan are so great that the decision should be wholeheartedly awarded to it. It provides the greatest relative degree of disinterestedness. It offers the easiest way to technical, competent personnel. It offers the possibility of the setting up of districts suited to maximum efficiency of assessment. It offers possibilities of economies in the way of optimum functional, as well as regional, division of labor, by making it possible to have specialists for special types of properties. It offers economies in optimum temporal adjustment: instead of either too frequent assessments or rigid, arbitrarily set long intervals applicable in a crude average way to the entire state, it allows flexibility of adjustment of assessment to economic value changes when and where they occur. It offers economies in the setting up of an administrative appeal process. It does away entirely with the duplicatory wastes of multiple equalization boards and duplicatory assessment by town and village officers. It offers the possibility of maximum efficiency in the preparation of tax rolls by modern labor-saving machines. In short, it offers the opportunity to handle the function with maximum impartiality and optimum efficiency.⁵

Expert Opinion

EXPERT OPINION A GENERATION AGO—The advantages of expertness and impartiality which would be gained by having the state appoint assessors have long been recognized by fiscal scientists, tax commissioners and advisers to governments. Typical of expert opinion on the subject a generation ago are pronouncements of Prof. T. S. Adams, Prof. Carl C. Plehn and the Committee of the National Tax Association on Method of Selecting Assessors.

T. S. Adams.—At a conference at which he discussed methods of securing efficient assessors, Prof. T. S. Adams stated: "The ulti-

⁵ It may be mentioned that there are several additional advantages to be gained by having all property valuations made by the state. For example, equalization of state assessed public utility property and locally assessed "common property" in states which use the *ad valorem* method of taxing public utilities. In New York, where real estate of public utilities is assessed locally, or, by an engineer of the staff of the Tax Commission upon request, it would be far better to have all public utility property assessed without exception by the state. Again, there are interesting possibilities of integrating inheritance and estate tax administration with state property tax administration, with possible economies therefrom. Aside from these advantages in the field of taxation, there would be other advantages. Respectable real estate assessments would be of value to prospective purchasers of real property, banks, etc., and to all interested in knowing real estate values. Because of the absence of a market in real estate where values are currently quoted, this would be a very real advantage. Such assessments would also be valuable in the gross for statistical purposes, such as land utilization programs, reorganization of local government programs, and similar uses.

mate remedy will probably be found in the appointment of local assessors by the State tax commission, or by the supervisors of assessments, under civil service tests; their retention in office during good behavior, together with a compensation adequate for the brains and backbone required in this difficult work. This remedy would, in most states, require a constitutional amendment. It is probably many years ago. I personally, however, am surprised at the frequency with which I hear the plan recommended by people whom I had supposed to be indissolubly wedded to so-called local democracy."⁶

C. C. Plehn.—Prof. Adams was not one of the ardent supporters of state appointment of assessors, although he recognized its advantages. Prof. C. C. Plehn advocated the change much more warmly. The following is from an address made at a conference on taxation held at the University of Washington in 1914:

"... the state tax commission should appoint assessors under civil service rules. The assessors may be removable for cause, but should be, ordinarily, appointed for life. They should be eligible for promotion from the less to the more remunerative districts. Everything possible should be done to make the office a life career and not, as too often now, a casual employment. The idea is to develop a professional spirit and interest. The assessors should be deputies of the commission, its agents in the field, working not independently, nor, as now, one against the other."⁷

The National Tax Association Committee, 1915.—The report of the Committee on Method of Selecting Assessors is representative of practical tax commissioner thought on the matter in 1915. The committee was composed entirely of state tax officials, with Samuel Lord, then head of the Minnesota Tax Commission, its chairman.⁸ Four plans were recommended. The first two plans provided for state appointment, the last two for local election with state qualifying examinations. The plans most preferred were as follows:

"The first plan considered provides that each county shall constitute an assessment district; that all assessors shall be appointed by the tax commission or some other body having similar powers and functions; that they shall be selected from a civil service list for an indefinite term and be removable only for cause; that

⁶ T. S. Adams, "Method of Securing Efficient Assessments," *Proceedings of the Twentieth Conference for Education in the South*, held at Richmond, Virginia, April 15-18, 1913, p. 181.

⁷ Carl C. Plehn, "An Ideal System of State and Local Taxation," *Taxation in Washington*. Papers and Discussions of the State Tax Conference at the University of Washington, May 27-29, 1914. Bull., Univ. of Washington ex ser. no. 12, p. 218.

⁸ The other five members were William H. Corbin, then State Tax Commissioner of Connecticut; Allan C. Girdwood, then Secretary of the Maryland Commission; J. W. Bislawn, then Commissioner, Washington State Board of Tax Commissioners; James A. Houck, then Commissioner, Indiana State Board of Tax Commissioners; and John S. Edwards, then Commissioner, Florida Tax Commission.

they shall devote all of their time to the duties of their office. This plan further provides that the appointing body shall have power, and it is made its duty, to determine the county in which each appointee shall serve, without regard to his place of residence, and to change any assessor from one county to another whenever in its judgment the change will increase his efficiency, improve the service, or be for the public good. It is provided in this plan that whenever for any cause an assessor is unable without assistance to assess all of the property in his county he shall have power in accordance with certain carefully defined regulations and within certain definite limitations, to appoint a sufficient number of deputies and assistants to insure a full listing and accurate valuing of all property in the county. All appointments made by the assessor under this plan are to be selected from a civil service list. The appointees are removable by him at will and neither the assessor nor any of his deputies or assistants are to take any active part in party politics.

"The second plan considered is exactly like the first except that in this plan the assessor must be a resident of the county, if there is any one in the county who has passed the necessary civil service examination who will accept the position. In case there is no eligible citizen in the county who will accept the position it is made the duty of the appointing body to select some qualified non-resident of the county to fill the position. In this plan a resident appointee cannot be changed to any other county."⁹

EXPERT OPINION IN RECENT TIMES.—In the years which have followed, state appointment has continued to be supported by the consensus of expert opinion as the best method of selecting assessors, and some of the advantages of complete transfer of the function to the state have been recognized.

R. M. Haig.—Thus, in 1920, the New Mexico Special Revenue Commission for which Prof. R. M. Haig was special counsellor recommended state administration of assessments: "Our only road to tax reform is one which leads away from the conception of the tax administrator as a political office-holder and approaches the conception of the administrator as a professional technician whose prosperity and well-being depends entirely upon his skill, impartiality and industry."¹⁰ The Commission recommended "that the entire assessment procedure be centralized and professionalized" and proposed a new assessment organization for the state. It suggested that the state be divided up into five districts, each headed by a district supervisor. These supervisors were to have charge of the local assessors and deputies, and to have the power to move assessors or deputies from one county to another temporarily as the exigencies of the work required. All of the officials were to

⁹ "Report of Committee on Method of Selecting Assessors," *Proceedings of the National Tax Association*, 1915, p. 203.

¹⁰ *Report of the New Mexico Special Revenue Commission*, 1920, p. 27.

be appointed by the State Tax Commission after examination, and to hold office during proper performance of duty.¹¹

Jacob Viner.—In 1924, the Efficiency Commission of Kentucky for which E. O. Griffenhagen was director of research and Prof. Jacob Viner, special counsel on taxation, after a discussion of the shortcomings of the elective system, stated:

"The ideal system would be one under which the County Tax Commissioners were appointed, under indefinite tenure and subject to civil service rules, by the State Tax Commission."¹²

W. J. Shultz.—Prof. Shultz has recommended state administration of assessment as the most desirable type of administration, but has expressed doubt as to its political practicality.

"Most of the ills of general property tax administration result from the system of localized administration which is traditional in the United States. The ideal reform would be to centralize all the administrative machinery of the general property tax in a state tax body, as has been done in the case of most income taxes, corporation taxes and other special taxes. The tradition of local fiscal autonomy is probably still too strong in most states to permit this reform in the near future. The next best choice, and this is a practical aim, is to centralize property tax assessment and collection procedure in county officials."¹³

R. G. Blakey.—Prof. R. G. Blakey has taken a position similar to that of Prof. Shultz. He believes state appointment of assessors to be highly desirable, but does not believe public opinion is ready for it:

"The greatest single cause of defective local assessment is the method of choosing local assessors by election for relatively short terms. The natural result of this method of choice is that a large proportion of the assessors are without special training or experience that fits them for their task, and they are subject to political pressure and biased by desires to favor their political supporters and their localities. The low salaries offered and the short tenure of office do not encourage men of great ability and proper training to run for office and, of the various candidates that enter the race, it is not always true that the voters act with rare discrimination and select the best. The evils of this method of selecting assessors are naturally greater in states making the township the tax unit than in states which, like West Virginia, select a county assessor.

"Since the first essential of a good assessment is an assessor qualified by training and experience to do his work, and since elected county, township or city assessors are unlikely to be so qualified, there is a strong tendency for tax experts to recommend

¹¹ *Report of the New Mexico Special Revenue Commission, 1920*, pp. 29–32. These recommendations were made as particularly applicable to New Mexico conditions.

¹² *Report of the Efficiency Commission of Kentucky, 1924*, Part I, p. 255.

¹³ W. J. Shultz, *American Public Finance*, 1931, p. 431.

that the local assessor, a purely administrative official having nothing to do with governmental policies, should be appointed by the state tax commission. Since, however, such appointment of assessors is not likely to be favored by the people, it becomes necessary to compromise between political expediency and efficiency, and to secure the best possible results from elective assessors."¹⁴

S. E. Leland.—Prof. Simeon E. Leland has warmly advocated state administration of assessments. The following is from a recent article in *The Tax Magazine*.

"The property tax, which is the prevailing source of state and local revenue is now locally administered through locally-elected officials under state supervision; it should be made a state-administered tax, with the assessors and their supervisors state officials, receiving their positions by appointment rather than election, and holding them under proper civil service rules. The valuations of taxable property should be made by appraisal methods under approved techniques, which would result in more uniform and better assessments than those now made by local officials under nominal supervision by the state; territorial inequalities could be eliminated and the need for equalization would disappear."¹⁵

M. S. Kendrick—Prof. M. Slade Kendrick asks the following: "What can be done to improve the assessment of real property in the United States? How can the few bright spots be made general instead of the product of an unusual combination of local circumstances?"¹⁶

His answer consists mainly in the recommendations that the assessor be appointed by the State Tax Commission under civil service regulations and that he hold office during proper performance of duty. Discussing these recommendations at greater length he observes:

"Tenure during proper performance of duty means that the assessor who would continue in office must do his work well. Thus the emphasis is placed where it belongs—on the work. Moreover, there is every reason for continuing the good assessor in office rather than subjecting him to periodical hazards of election or appointment. Whatever mechanical aids further the proper assessment of real property, that knowledge of local values which the skilled assessor accumulates over a period of years is of capital importance. A good assessor becomes in time a better assessor. He should be continued in office in order that his district realize the benefit from this growth of his knowledge of assessment.

"The matter of records and other aids to assessing is mostly a question of a properly qualified assessor secure in his tenure of office, for such an assessor would accumulate records."¹⁷

¹⁴ R. G. Blakey, *Report on Taxation in West Virginia*, 1930, pp. 174-175.

¹⁵ S. E. Leland, "The Integration of Governments and Fiscal Systems," *The Tax Magazine*, April 1931, pp. 153-54.

¹⁶ M. Slade Kendrick, *Taxation Issues*, 1933, p. 59.

¹⁷ *Ibid.*, pp. 63-64.

The Institute for Government Research.—The Institute for Government Research of the Brookings Institution has advocated state administration of assessments in its recent surveys of state and local government.

In the Mississippi report, its recommendation was most vigorous in this respect: "The most desirable option in our opinion is to provide for the appointment of all assessors in the state by the State Department of Taxation, which is provided for later. In taking this step Mississippi will be in line with the best thought on the subject and take a position of leadership among the states. The 1918 Committee's recognized this necessity, but were led to a compromise out of deference to home rule. Conditions of property taxation have grown worse instead of better in Mississippi since 1918, and this step is needed now if it ever was. In our opinion, Mississippi will not achieve the character of property taxation that it should have until it provides for property taxation the same centralized administration which is found necessary in effectively administering its income tax."¹⁸

In its New Hampshire report, the institute recommended eventual adoption of state administration, but was inclined to yield to considerations of political expediency with reference to the immediate situation:

"Consideration of the technical features of assessment procedure leads to the conclusion that the assessment unit must be sufficiently large to justify the employment by appointment rather than election of a technically qualified personnel equipped with proper facilities. If New Hampshire continues to develop industrially, it will probably become necessary to transfer the duty of assessing property from the towns to the state. On purely technical grounds this step should be taken immediately. Students of property taxation are generally agreed that the highest standard of assessments attainable is possible only under state administration. Tradition and strong sentiment, however, exist in New Hampshire for the retention of the assessing function by the towns. It will probably be long before a system of state administration will be achieved. In the meantime the practical procedure will be one which acknowledges public opinion as it exists and attempts to make whatever improvements are possible under prevailing conditions."¹⁹

In its Alabama report, the institute was again emphatic in its recommendation for state administration:

"To establish equalized valuation on a state-wide basis, to assure the application of uniform standards, to make possible the enforced use of a scientific assessment technique, the power to appoint

¹⁸ Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of State and County Government in Mississippi*, 1932, p. 157.

¹⁹ Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State, County, and Town Governments of New Hampshire*, 1932, pp. 523-524.

assessors should be placed with the State Tax Commission. This procedure will permit the proposed Department of Taxation to compile and analyze the necessary information, to formulate and apply uniform standards and to devise and enforce state-wide use of a scientific assessment technique in arriving at assessed valuations. There is no other choice if the state is to secure the best administration of the property tax obtainable. The change will not create any new powers, but it will bring existing powers under control by subjecting them to centralized responsibility. Public opinion can be relied upon to protect the public against abuses. It will not deprive local governments of any legitimate power of home rule. Counties and municipalities will still be free to determine the activities which they will undertake and the expenditures which they will make."²⁰

Griffenhagen and Associates, Ltd.—In their recent survey of government in Wyoming, Griffenhagen and Associates, Ltd, well-known advisers to governments, expressed a pronounced preference for state administration of assessment.

"The determination of property values has become a specialized problem, calling for careful analysis by experts, particularly those involving special types of property in urban areas, oil properties, mines and timberland.

"It is obvious that the necessary machinery and personnel are not within the financial resources of most of the counties. In any event, it would be quite unnecessary to maintain permanent technical staffs in all of the 23 counties in the state. A centralized, state-operated body would be in a position to maintain a minimum force of trained assistants, with specialists in different branches, adequate to assess effectively all of the property in the state, at much less cost than that of the present elected assessors.

"It is proposed, therefore, that full responsibility for, and authority over, the assessment of all property in the state for taxation, as well as the administration of all other tax laws, be centralized in the division of taxation of the proposed department of finance, with the necessary professional staff of persons of special training for the work.

"As an alternative in case this recommendation cannot be put into effect, it is proposed that the assessors be appointed by the county commissioners, or preferably by the proposed county managers, responsible to the commissioners, but be subject to the fundamental control, training, and supervision in the use of prescribed uniform methods, of the proposed division of taxation. This plan is far less desirable than that of complete assessment by specialized assessors operating as employees of the proposed division of taxation, and should not be considered so long as there is a possibility of securing action on the former."²¹

²⁰ Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State and County Governments of Alabama, 1932*, p. 286.

²¹ Griffenhagen and Associates, Ltd., *Report made to the Special Legislative Committee on Organization and Revenue, Wyoming, 1933*, Vol. I, pp. 498-499.

Summary of Expert Opinion.—Expert opinion is almost unanimous in recognizing the technical advantages of state administration of assessment. The most important consideration which has stood in the way of more vigorous endorsement of the transfer of the function has been that of political expediency.

Political Expediency

THE GENERAL ARGUMENT.—The consideration of political expediency has affected the proposal for state administration of assessment in two ways: (a) That state administration would be contrary to popular sentiment on local self-government; (b) that state administration is so drastic a change (a constitutional amendment would often be necessary) that it would have little chance of enactment.

CRITICAL ANALYSIS—*Popular Sentiment on Local Self-Government.*—As for the first aspect of the consideration of political expediency, namely, that state administration would be contrary to popular sentiment on local self-government, it has already been suggested that there is really no application of the theory of local self-government involved in the transfer of the function of assessment of the state. The localities would still be free to determine the character and scope of their activities, and the amount of public expenditures which they wished to finance. The argument of political expediency in the case of assessment of property resolves itself, therefore, into the acceptance of a popular state of mind which is unaware of the real nature of the question under consideration.

No one can deny the importance of public sentiment, and no expert worth his salt will neglect it in his recommendations. But catering to superficial and inaccurate misconception cannot be defended. It is one thing to accept a popular sentiment which is grounded on the interest of the majority of the people affected. It is quite another thing to bow to the sentiment of a public which has not realized where its best interests lie.

What is needed is a vigorous educational campaign, enlightening the people as to where their best interests actually do lie. The taxpayers should be clearly shown that the less discrimination and favoritism in assessments, the less burdensome will the tax on real property be. It should be emphasized that since the real property tax is an apportioned tax, that one man's meat is truly another man's poison; that the more taxes which personal and political friends of the assessors "get away with," the more will the majority of taxpayers contribute; that every dollar of taxes which large taxpayers avoid because of the "availability" or incompetency of untrained local assessor is made up out of the pockets of the small taxpayers. Properly presented, the proposal to substitute for an assessor who operates on the basis of "local familiarity" (in more senses than one); who is swayed by considerations of local wealth and politics; and who is unacquainted

with the worth of large, valuable properties,—an assessor utilizing standard uniform methods; who will be as competent to deal with large properties as of small, and with a minimum of any sort of favoritism, should make a strong appeal to the majority of the taxpayers.

The same line of reasoning applies to the general public as to the people who pay real property taxes directly. The majority stands to gain by the proposed change. The real property tax is the backbone of local finance. By improving its administration, delinquency can be minimized, the financial foundation of local government strengthened, and the services performed by them stabilized. The localities should be only too glad to have this important and difficult task taken off their hands and placed with a jurisdiction which will be able to handle it with far greater efficiency. There is no cause for loss of pride. The transfer would simply be a frank recognition of the technical nature of the task of assessment and allocation of the function to a governmental unit which can give it the necessary technical administration. From this point of view, it would not be necessary to have the state property tax an important element in the state fiscal system. Indeed, the less financially important the state levy, the greater will be the probability of maximum impartiality and disinterestedness.

Political Expediency of Major and Minor Reforms in Taxation.—The second aspect of the consideration of political expediency is the belief that the proposal is too drastic, that it would call for constitutional amendment, for example, and therefore would have little chance of practical enactment. Hence less thoroughgoing reforms are offered as alternatives, the feeling being that half a loaf is better than none. With this type of reasoning the writer is in disagreement. In the first place, it is difficult to achieve even minor reforms in the field of taxation. Because of the fact that taxation is regarded as an evil, popular enthusiasm for tax reform is hard to enlist. When times are good,—when the finances of governmental units are not in bad condition,—it is exceedingly difficult to stimulate enough public interest to put through even minor reforms. When conditions are such that public interest may be aroused, the opportunity for substantial improvement should not be wasted in the achievement of minor improvements which merely make the situation tolerable enough to preclude the possibility of arousing vigorous interest in further reforms, thus making the possibility of really substantial reform more remote than before.

Even with the necessity for a constitutional amendment, it is not at all certain that the minor improvement will be easier to achieve as a matter of practical politics. Because of the unattractiveness of tax matters to the people, only such plans which yield promise for substantial benefits will have a chance of securing strong popular backing. Minor improvements in real property tax administration might very well induce only mild interest,

insufficient to counteract the organized efforts of the minority groups which are gaining by the operation of the present system. A plan such as state administration might, if properly presented to the people by a vigorous educational campaign, have even greater chance of political success than a minor reform.

THE OHIO EXPERIENCE OF 1913-1915.—It may be urged that state administration has proven itself unpopular by the Ohio experience of 1913-1915. In 1913, the Warnes law, providing for centralized assessment, was passed in that State. The county was designated an assessment district, and in each county, centrally appointed assessors were established, one in counties of less than 65,000 population, two (of different political faith) in counties with populations over this number. These assessors were appointed by the Governor, and they in turn were permitted to appoint such a number of deputies, assistants and clerks as the Tax Commission determined. In each county, the Tax Commission was to appoint a district board of complaints, composed of three members, not more than two of which could be from the same political party. These boards were to decide on complaints made to them, appeals lying to the Tax Commission.²²

The law remained in effect for only two years, during which time the Tax Commission did not order the district deputies to make general revaluations. A political party pledged to abolish this centralized assessment system came into power in 1914, and in 1915, the Warnes law was superseded by the Parrett-Whittemore law which made the county auditor the chief assessing officer.²³

There was no state civil service law in Ohio, in operation at the time the appointments were made.²⁴ And as a matter of fact, the result was a long list of political appointments.²⁵ In this form, the plan did not offer the advantages of expert, impartial administration of which state administration under civil service regulations is capable. Hence popular reaction to it cannot fairly be taken as an index of popular reaction to the proposed type of state administration. Moreover, popular disapproval of state administration in Ohio in 1915 is no proof that state administration will be always unpopular. The power of reassessment was regarded of doubtful validity in the beginning, and its wide exercise, in Michigan for example, was often deeply resented at first. Extensive state reassessment programs have proven to be very welcome in Oregon and Utah, and in New Hampshire, a state in which the sentiment for local self-government is very strong, the local asses-

²² For further detail see A. B. Peckinpugh, "Operation of New Centralized Tax Law in Ohio," *Proceedings of the National Tax Association*, 1914, p. 127 *et seq.*

²³ H. L. Lutz, *The State Tax Commission*, pp. 482-483.

²⁴ S. Gale Lowrie, Director of the Cincinnati Municipal Reference Bureau, Letter to T. S. Adams, *Bulletin of the National Tax Association*, May 1910, pp. 103-104.

²⁵ Lutz, *op. cit.*, p. 504.

sors now *invite* the Tax Commission to make reassessments. The experiment of Ohio may have been simply premature. The burden of taxation on real property is now far more severe than it was twenty years ago; the inequalities are in consequence more significant. Moreover, the progressive improvement which the system of supervision and equalization had held promise for has not materialized. Inequalities are more intolerable than before, state supervision has proven inadequate, and state administration would be much more apt to receive a fair trial now than it did in 1913 in Ohio. Now is an auspicious moment to take the step. The installation of modern assessing systems will give work to unemployed in a public works project of undisputable worth. It might be possible to secure some of the funds from the Federal government. Funds for this purpose, on a smaller scale, have already been obtained in a number of states, including New York.²⁶

Conclusions—A Wider View

Reduced to its essence, the problem of inequitable assessments is a problem of lagging adjustment. The maladjustment has reached an acute stage, as the extensive inter-property, inter-district, and inter-county inequality and regressivity found in the ratio studies surveyed in the second part of this report have conclusively demonstrated. And the investigations and surveys of currently used methods and systems have also revealed that, with the exception of the larger cities, local tax administration has lagged woefully behind modern needs.

In sharp contrast to the localities, the states have made much progress toward the development of expert, disinterested, technical tax administration. This differential in administrative efficiency between state governments and local governments is not

²⁶ For example, funds for the installation of record card systems in cities and villages of Wisconsin were secured by the Wisconsin Tax Commission as a Civil Works Administration Project. See Charles D. Rosa, "Civil Works Administration Assistance in Wisconsin Property Tax Assessment," *Bulletin of the National Tax Association*, February 1934. In Connecticut, several towns have been able to install modern methods as FERA projects, and similarly in Rhode Island. In Idaho, a study of assessment inequality by the State Board of Equalization was authorized as an FERA project.

Since this was written, such activities have increased. The following is from a comment in the *National Municipal Review*, issue of November 1935, at p. 649, under the caption "WPA Funds Aid Assessors":

"Pennsylvania has gone in for map-making projects. Lehighton, Dowingtown, Phoenixville, Landsdowne, Wilkes-Barre, Haverford, Parkesburg, Ridley Park, Springfield, Edgeworth, and the counties of Delaware and Chester have had applications for this purpose approved.

"Mansfield, Ohio, has a project to correct and bring tax maps up to date. Wheeling, W. Va. is making a map of all city property, and Kanawha County, W. Va., a card index system for the assessors' office.

"Hartford, Conn., is undertaking a reassessment and installation of a modern assessment system. Washington, D. C., is compiling and indexing old records in the assessors' office. Portland, Ore., is making an appraisal of public dock properties. New York City is making an investigation of real property exemptions and inequalities, while Indianapolis, Ind., is making a survey of all taxable buildings for the collection of appraisal data. South Bend and Mishawaka, both in Indiana, have applications approved for comprehensive real property surveys. In Ohio, Cincinnati is compiling a listing of special assessments since 1920, to ferret out the reason for delinquencies.

confined to tax administration, but is present in practically every sphere of state and local government. The chief reason for it, in the writer's view, is the fact that whereas the states have had to face that important spur to division of labor and specialization,—the problem of large scale operations,—the localities have not.²⁷

The problem of the technological lag of local units of government has been met in most fields of local government by state supervision. However, the system of supervision involves the utilization of an administrative base which is of an inexperienced, non-technical character. It is therefore capable, even at best, of only partially satisfactory results. Students of public administration have realized this, and more fundamental changes than supervision have been suggested. Some have recommended that the rural township or town be entirely abolished, and that the county be made a general administrative area for rural government. Others have recommended more drastic reorganization, in which new areas, based on such factors as wealth, density of population, and social and psychological unity are to be constructed. Others have suggested that there need not be one general administrative area, but that each function have an administrative district best suited to its own particular nature. Others have recommended that certain functions now locally administered should be transferred to the state.

The modernization of the structure of local government and the technicalization of its administration is a highly desirable objective, and every effort should be made to speed its consummation. When local government will have "caught up," both structurally and functionally, with modern needs, the local units will be able to give to the function of assessment the type of administration which it requires. But since there is no loss of legitimate local self-government involved in this particular case, and since the state may very well be the *optimum* unit of assessment administration, what is to be gained by waiting? What good reason is there for postponing at least a trial of that remedy which the consensus of expert opinion has long recognized as the most commendable for present assessment ills?

Hamilton County is engaged in a land use survey, to include maps and land classification, while Cleveland is making surveys of family movements in 1934 and the use of thoroughfares to show trends and effects on property values.

"Among proposed projects of larger size are the tax assessment and land surveys for the entire states of Arkansas and Michigan and the project submitted by the city of Ashland, Ky., covering a real estate survey of the entire city, which is to include a scientific assessment of all real estate and improvements, plus a revision of the city maps and photographs of all improvements."

²⁷ It should be noted that under a *laissez-faire* concept of government, which, with modifications, has been the traditional concept in the United States, affairs of government are of less direct and vital interest than private affairs. Hence there was a general lag of governmental efficiency and rationalism in the spheres of national and state administration. For a long time, the state itself lagged behind the needs of the time in the matter of taxation, and it was only at the very end of the nineteenth century that the modern full-time, appointive, technical state tax administration emerged.

PART IV
CONCLUSION

CHAPTER XIX

A PROGRAM FOR NEW YORK

Constitutionality of State Administration of Assessments in New York

At the present time, the Constitution as interpreted by the courts most probably would not permit the Legislature to provide for state administration of assessment in New York. This conclusion is based on the best available authoritative opinion, as summarized below.

AUTHORITATIVE OPINION PRIOR TO 1925.—Prior to 1925, there had apparently been little disagreement on the impossibility of abolishing the office of town assessor under the Constitution. For example, the Special Joint Committee on Taxation and Retrenchment which reported in 1923 stated: "Although the office of assessor is nowhere directly referred to in the Constitution, the courts have uniformly held that the function of assessing inheres in the town, village and city governments; and that the Legislature is debarred from enacting any legislation designed to transfer from the town officials to county or State officials the function of assessing general property of the type which existed in colonial days.

"Consequently it will be necessary to amend the Constitution along the lines recommended in previous reports of this committee before any fundamental reforms can be brought about."

THE SPECIAL JOINT LEGISLATIVE COMMITTEE OF 1925.—In 1925, the Special Joint Legislative Committee took a different view of the matter. After a survey of the cases, it declared:

"It may therefore be said by way of summary that the restrictions of Art. X, sec. 2, of the Constitution extend to all county, city, town or village *offices* which were in existence prior to January 1, 1895, and that all such functions, if exercised at all, must be administered by *officers* who are respectively elected or appointed by such counties, cities, town or villages. However, where new

¹ *Report of the Joint Special Committee on Taxation and Retrenchment, 1923, p. 116.* The pertinent clause of the Constitution, Art X, sec. 2, reads as follows:

"All county officers whose election or appointment is not provided for by this Constitution, shall be elected by the electors of the respective counties or appointed by the boards of supervisors, or other county authorities, as the Legislature shall direct. All city, town and village officers, whose election or appointment is not provided for by the Constitution, shall be elected by the electors of such cities, towns and villages or of some division thereof, or appointed by such authorities thereof, as the Legislature shall designate for that purpose. All other officers whose election or appointment is not provided for by this Constitution, and all other officers whose offices may hereafter be created by law, shall be elected by the people, or appointed as the Legislature may direct."

functions or duties are created, and old functions or duties are so intermingled and associated with them as to make it impracticable wholly to separate them, the courts will permit the exercise of such combined duties by an officer of a different jurisdiction and not necessarily 'locally' elected or appointed.

"The county unit assessment plan advocated by the committee provides for an entirely new officer with new functions. It is true that these functions will include the present work of the local assessor but they will be materially augmented because they will include as well as the function of equalization within the county. The work of equalization and the gathering of value statistics will be added to, and completely intermingled with the old duties. . . .

"A second feature of the committee's plan provides for the assessment by the state tax department of property which extends through more than one tax district. It is true that such property is now, theoretically, completely assessed piecemeal in each one of the taxing units. It is well known, however, that such property, even omitting the franchise, has a very different value as a going concern taking the entire property as a whole than it has when considered in individual divisions. This fact has not been recognized in the past and the assessment of such property as a whole has, therefore, never been a responsibility of the local assessors. Consequently, the enactment of legislation which provides for its assessment, even though it may involve the transfer of certain work from time immemorial entrusted to local assessors, can hardly be considered a violation of Art. X, sec. 2, of the Constitution.

"It is, therefore, the conclusion of the committee that properly drawn legislation to provide for the county assessment unit and for the transfer to the State Tax Department of the assessment of property of public utilities which extends through more than one taxing district may be achieved without constitutional amendment.

"It must be recognized that Art. X, sec. 2, of the Constitution was enacted to protect localities against unfair political meddling with the rights of local government. The program which the committee advocates has no such motive. It is purely in the interests of adapting the tax machinery to present conditions. We wish to open the way for the application of the same scientific methods of assessment in the rural sections as have been adopted in a number of the cities. This cannot be done with a system of part-time, underpaid local assessors. We wish to make way also for the fair appraisal of all kinds of property which cannot be reached under the present system. Under these circumstances the program which we are advocating represents new functions and the creation of new officers. We do not believe that the court will regard such a program as a violation of Art. X, sec. 2, of the Constitution."²

² *Report of the Special Joint Committee on Taxation and Retrenchment, 1925, pp. 119-120.*

THE NEW YORK STATE COMMISSION FOR THE REVISION OF THE TAX LAWS, 1932. In 1932, however, the New York State Commission for the Revision of the Tax Laws decided that a constitutional amendment would be necessary to abolish the office of town assessor. This conclusion was based on a thorough study of the cases: (a) to which the "home rule" restriction had been held applicable; (b) recognized exceptions, and (c) offices to which the restriction has been held not applicable. It constitutes the most authoritative current opinion on the subject.³

CONCLUSIONS.—At the present time, then, permanent state administration probably cannot be established. However, temporary state administration can be instituted, pending the adoption of the necessary constitutional amendment, by broadening the present reassessment statute. In its present form, judicial approval is necessary before the State Tax Commission can order a reassessment, and even then the power is limited to ordering the local assessors to reassess.⁴ The statute should be changed so as to empower the Tax Commission to reassess, on its own motion and with its own personnel. In order to avoid the possibility of vitiation of the results by local boards, and still give the people a chance for informal, impartial review, a new Board of Tax Appeals could be established to consist of nine valuation experts, subdividing into three boards hearing appeals in the localities reassessed.

A Program for the Near-Future: A State-Administered Reassessment of the Rural Areas and the Third Class Cities

A State-wide, State-administered reassessment of the rural areas and third class cities would right the worst of the assessment situation in New York. As has already been described, considerable progress has been made in recent years in improving assessment administration in the larger cities of the State.⁵ The situation in the rural areas and smaller cities of the State calls most urgently for speedy rectification.

TAX MAPS.—For purposes of this reassessment, the first step would be to make tax maps, preferably by aerial photography, for all of the areas except in the few cases where adequate tax maps already exist. Good maps exist in Westchester county and in a relatively small number of cities, towns and villages throughout the other counties of the State. Some counties, such as Erie, Monroe, Steuben, Chemung, Rockland and others have already been photographed.⁶ In this connection it may be mentioned that the

³ *Report of the New York State Commission for the Revision of the Tax Laws, 1932, Part II, p 244, and Memorandum No. 3, Appendix.*

⁴ *Tax Law, sec. 173-a.*

⁵ *See p. 46 supra.*

⁶ Data from interview with Mr. Harold R. Enslow, Assistant Director, Bureau of Local Assessments, Land Tax, Equalization and Special Franchise Tax, March 11, 1935, and letter from Mr. E. H. Corlett, Fairchild Aerial Surveys, New York City, under date of December 1, 1934.

state of Connecticut has recently had an aerial mapping survey of the entire state, made by the Highway Department, but suitable also for tax work if the maps are enlarged. There appears to be little question that for a large scale mapping program such as is herein recommended, the aerial photographic method is the cheapest and most appropriate method.⁷

CARD FILES AND APPRAISAL RECORDS.—Card files, with the relevant data entered on appropriate appraisal cards should be installed also. The rural forms in use in Minnesota and Iowa may be modified to fit conditions in rural New York. The Wisconsin cards for urban properties could be adopted and adapted in the third-class cities. Efforts should be made to carry on the reassessment as a public works project, obtaining federal funds for part of the expense if possible. Provision should be made for reviews to be made by a newly established appellate body of nine members which should travel over the state (in boards of three) for the convenience of taxpayers.

The Long-Run Program: Permanent State Administration

At the same time that efforts are being made to carry out the proposed reassessment, the constitutional amendment necessary to establish state administration should be started on its way.

In order to amend the Constitution in New York, it is necessary for two differently constituted legislatures to pass upon the proposed amendment after which it must be accepted by a majority of those voting on the amendment.⁸

⁷ The State Tax Commissioner of Connecticut has advised the writer that aerial tax maps have proven very satisfactory in this state. In the recent state-wide photographic survey of Connecticut the National Guard furnished the flying service and Fairchild Aerial Survey, Inc. the photographing and engineering service. In answer to an inquiry to Fairchild Aerial Survey, Inc. on the Connecticut experience and the possibility of similar work in New York, the writer was informed as follows:

"Because of its size, and of local and topographic conditions, Connecticut was mapped at a base scale of 1"=1200' (4"=approximately 1 mile). Similar considerations prompt me to advise that New York be mapped at a base scale of 1"=2000' for suburban and open country, and at 1"=1000' for small city centers, and at 1"=500' for large city congested areas. Connecticut receives tax map sheets at 1"=200' for low-priced land, and 1"=100' for all other. We recommend for New York 1"=400' for open country, 1"=200' for suburbs, 1"=100' for small city centers, and 1"=50' for large city congested areas. By actual area, only a minute fraction of the State will require anything but the less expensive sheets at 1"=400'." Letter from Mr. E. H. Corlett, Fairchild Aerial Surveys, Inc. under date of December 1, 1934.

⁸ Art. XIV, sec 1, of the Constitution, relating to constitutional amendment reads as follows: "Any amendment or amendments to this Constitution may be proposed in the Senate and Assembly; and if the same shall be agreed to by a majority of the members elected to each of the two houses, such proposed amendment or amendments shall be entered on their journals, and the yeas and nays taken thereon, and referred to the Legislature to be chosen at the next general election of senators, and shall be published for three months previous to the time of making such choice; and if in the

THE REORGANIZATION OF LOCAL GOVERNMENT AMENDMENT.—In this connection, it may be mentioned that an amendment permitting local government reorganization in New York has proceeded to an advanced stage, the amendment to go to the people in November, 1935. This amendment will permit those counties which so desire to establish optional forms of county government to supersede the present defective system of county supervisor government, and to transfer town functions to either the county or the state. The Legislature is directed to provide for such options, and if the majority in both urban and rural sections in any county as well as the majority of those voting on the amendment in the county at large shall approve, any county will be able to make these changes. It should be noted that if ratified by the people in November, the amendment would permit the Legislature to provide for State administration of assessment in those counties which desire it. This amendment would therefore permit piecemeal adoption of State administration of assessment.⁹

NECESSITY FOR A NEW AMENDMENT.—In order to be able to take full advantage of the potentialities of State administration of assessment in the way of efficiency and economy, an amendment allowing the Legislature to provide for *State-wide* rather than *piecemeal* adoption of the new system should be set on motion.

Legislature so next chosen, as aforesaid, such proposed amendment or amendments shall be agreed to by a majority of all the members elected to each house, then it shall be the duty of the Legislature to submit such proposed amendment or amendments to the people for approval in such manner and at such times as the Legislature shall prescribe, and if the people shall approve and ratify such amendment or amendments by a majority of the electors voting thereon, such amendment or amendments shall become a part of the Constitution from and after the first day of January next after such approval."

⁹The amendment states: "No such form of government shall become operative in any such county unless and until adopted at a general election held in such county by receiving a majority of the total votes cast thereon in (1) the county, (2) every city containing more than twenty-five per centum of the population of the county according to the last preceding federal census, and (3) that part of the county, if any, outside of such cities. Any such form of government shall set forth the structure of the county government and the manner in which it is to function. Any such form of government may provide for the appointment of any county officers or their selection by any method of nomination and election, or the abolition of their offices, and may also provide for the exercise by the boards of supervisors or other elective body of powers of local legislation and administration and the transfer of any or all of the functions and duties of the county and the cities, towns, villages, districts and other units of government contained in such county to each other or to the state, and for the abolition of offices, departments, agencies or units of government when all of their functions are so transferred without regard to the provisions of article ten or any other provisions of this constitution inconsistent herewith."

Since this was written, the amendment has been approved (Nov. 5, 1935, effective Jan. 1, 1936). The vote was 1,288,297 to 499,332. The above citation and the other provisions of the amendment are now part of the Constitution, Art. III, sec. 26. For a good discussion of this amendment see L. R. Chubb, "County Government Progress in New York State," *American Political Science Review*, Feb. 1936, p. 90 *et seq.*

Organization and Procedure for Permanent State Administration

BASIC CONCEPT. OPTIMUM FUNCTIONAL DIVISION OF LABOR.—The basic conception upon which the proposed plan is founded is that of optimum functional division of labor. It would be perfectly feasible to take the present counties as assessment units for ordinary properties and provide for special assessors for extraordinary types of properties, such as public utility properties, manufacturing plants and the like. However, it would be far better to make the assessment administrative area functional rather than political in character. A more commendable assessment unit than a county is a fairly homogeneous economic area.

PROPOSED ASSESSMENT DISTRICTS.—Twenty districts, seven predominatingly urban and thirteen predominatingly rural, would appear to meet this requirement of optimum assessment administrative areas in New York. These districts are indicated by Map 1. There are seven metropolitan areas in New York, the New York City District, the Albany-Schenectady-Troy District, the Utica District, the Syracuse District, the Binghamton District, the Rochester District and the Buffalo-Niagara District. These districts could be assessed as economic units. The rest of the State could be divided up into areas based on rural land uses and geographical extent. Map I shows such a districting of the State for assessment administration. District I is predominatingly a truck and potato farming area with some county estates in the western part of it. District II includes considerable dairying, some general farming, poultry and fruit farms. District III is predominatingly a dairying region, with some fruit and potato farming. District IV is not very well suited to agriculture because of its high elevation and contains much forest and resort property. Much of it is owned by the State (Adirondack Forest Preserve). District V also includes State-owned forests (Catskill Forest Preserve). The privately owned land is utilized for resorts, dairying and poultry farming. District VI is an intensive dairying region, with some poultry, potato and truck farming. District VII is devoted to similar land uses. District VIII is predominatingly an intensive dairying region. In District IX, dairying, part-time farming and poultry farming are carried on. Districts X, XI and XII constitute the general farming areas of the State, Districts X and XII containing the better lands. District XIII is the premier agricultural region of the State, including the highly productive fruit belt south of Lake Ontario.

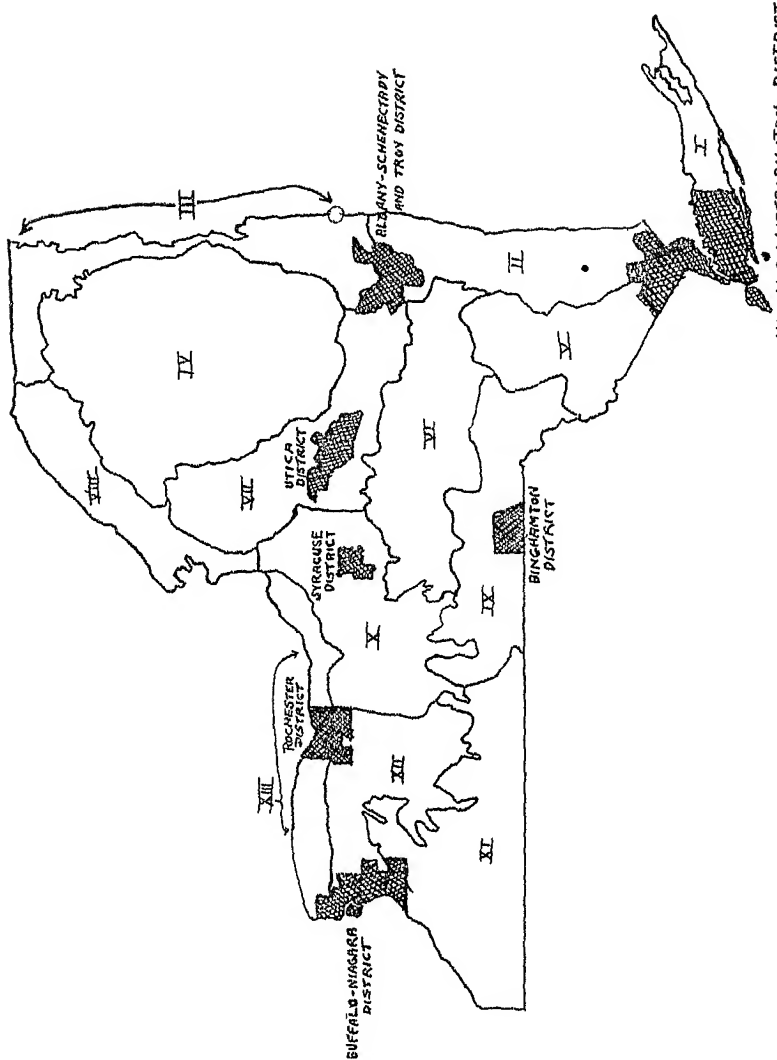


CHART I. SUGGESTED DISTRICTS FOR ASSESSMENT ADMINISTRATION IN NEW YORK STATE

These districts have been made in a tentative, suggestive way. They could be used for purposes of the proposed reassessment, and as a result of this experience, a better districting made for permanent administration of the function by the State. In each district, an assessment office would be set up, preferably in a centrally located city where such exist. A property tax commissioner and several assistants, all full-time, civil service, technically qualified experts, would make the changes in values as they occurred.

SPECIAL PROPERTIES.—For the less usual, more difficult-to-appraise property tax types, such as public utility properties, gas and mineral properties, etc., provision should be made for a corps of special property tax commissioners. These men could be qualified by training and experience to deal with such valuation problems, each man specializing in one particular type of property.

OPPORTUNITIES FOR ECONOMIES IN PREPARING AND EXTENDING TAX ROLLS—For processes which are of a highly mechanical nature, such as the preparation and extension of tax rolls, the proposed organization offers opportunities for utilization of modern labor-saving machinery. Each district office would be large enough under the proposed plan to make such machinery economically feasible. As for the special properties, these would be assessed and tax bills made out by the central office at Albany.¹⁰

CENTRAL ORGANIZATION—The proposed plan contemplates a Bureau of Assessment in the present Department of Taxation and Finance, headed by a Director and three Assistant Directors, one in charge of areas predominatingly urban, the second in charge of areas predominatingly rural, and the third in charge of special types of property.

PROVISION FOR EXPRESSION OF LOCAL PUBLIC OPINION.—It would be well to allow local public opinion to express itself. This could be arranged by having the district commissioner and his assistants travel over the district, holding local meetings of taxpayers, at which local views on relative values could be discussed. A record of the discussion would then be analyzed, together with all other pertinent data on value collected by the district office, and on these bases changes would be made from prior assessments.

PROVISIONS FOR INFORMAL, INEXPENSIVE REVIEW.—It is important that taxpayers be given the opportunity for inexpensive, informal review. This could be provided in a number of ways. Probably the best would be to establish a Board of Tax Appeals, composed of nine men trained in valuation, and independent of the administrative bureau. This tribunal could be divided into three boards of three members; each board to travel over the state,

¹⁰ For a good description of the best modern methods, see Chas. J. Maxcy, "Mechanization of Tax Assessments and Collections," *The New York Certified Public Accountant*, October 1934, p. 3, *et seq.*

holding local meetings where the number of appeals justify it, if not in three or four different places within a district, thus enabling every one to have a fair hearing. The decisions made by these boards should be final as to questions of value, appeals to lie to the courts only upon questions of law.

Concluding Observations

A word of caution is necessary in connection with the recommendation for State administration of assessments. Ordinarily, as has been described, real estate assessments have been made at less than full value, and even under present economic conditions, much property is underassessed. Under State administration, with presumably a far greater approximation to full value assessments than heretofore, existing State aid, State tax, and State debt limit relationships and adjustments might be disturbed. Some of these "disturbances" would actually be improvements, *i. e.*, more realistic application of these mechanisms. But at any rate, difficulties and problems might arise. These problems would best be handled by the creation of a local government board with extensive powers of central control over local finance along the lines recommended by the New York State Commission for the Revision of the Tax Laws in 1932¹¹. Not only would this board be serviceable in this way, but also it could prevent any tendency toward higher taxes attributable to this administrative reform. Effective central control of local finance of this sort would therefore serve as an aid in overcoming what is perhaps the greatest obstacle of all to the establishment of equitable assessments: the feeling that "true value" assessments mean high taxes. Once this fear is removed, the road to assessment reform should not be so difficult.

¹¹ *Report of the New York State Commission for the Revision of the Tax Laws submitted February 15, 1934*, Part 2, pp. 228-233.

BIBLIOGRAPHY

Good recent bibliographies relating to real property assessment and valuation are to be found in H. D. Simpson, *The Tax Situation in Illinois*, Studies in Public Finance of the Institute for Research in Land Economics and Public Utilities, Research Monograph No. 1, 1929; (by the same author) *Tax Racket and Tax Reform in Chicago*, Institute for Economic Research, 1930, R. W. Nelson and G. W. Mitchell, *Assessment of Real Estate in Iowa and Other Mid-Western States*, State University of Iowa, College of Commerce, Bureau of Business Research, Iowa Studies in Business No 10, 1931; Jens P. Jensen, *Property Taxation in the United States*, University of Chicago Press, 1931. The relevant sections of the invaluable *Index and Digest* of the addresses and articles relating to the subject in the *Proceedings* and *Bulletin* of the National Tax Association (1907-1925), prepared by the Blakeys, Roy G. and Gladys C., should also be consulted.

There is a short, critical bibliography in A. E. Buck, *Municipal Finance*, Macmillan, New York, 1926 (prepared by Philip H. Cornick), on works dealing primarily with the urban problem. *Agricultural Bibliography No. 29: Valuation of Real Estate with Special Reference to Farm Real Estate* prepared by the United States Bureau of Agricultural Economics in 1929, is, as its name implies, concerned primarily with references to works on the rural problem.

Many of the works cited in the comprehensive bibliography in Simeon E. Leland, *The Classified Property Tax in the United States*, Houghton Mifflin, Boston, 1928, relate to assessment and valuation. The same is true of *Agricultural Bibliography No. 25: Taxation and the Farmer*, 1928 (another of the bibliographies prepared by the United States Bureau of Agricultural Economics).

For the historical materials, Jensen's *Property Taxation in the United States* (already mentioned); H. L. Lutz, *The State Tax Commission*, Harvard University Studies, Vol. XVII, 1918; and the "American Bibliography of the General Property Tax" appended to Chapter I of Seligman's *Essays* and the list given in footnote 1 of Chapter VI of this volume, "The Taxation of Corporations" (at p. 144 of the Tenth Revised Edition, 1928), may be consulted.

I. WORKS CONTAINING SUBSTANTIAL MATERIAL ON ASSESSMENT AND VALUATION OF REAL PROPERTY

A. General Publications

- Ackerman, J. Walter, "Tax Maps and their Value to a Community," *Proceedings of the New York State Conference on Taxation*, 1930, 25 ff.
- Adams, J. Frank, "Equalization Boards: Methods and Possibilities," *Proceedings of the National Tax Association*, 1913, 61 ff.
- Adams, Thomas, "The British System of Local Taxation, Some Reactions to Professor Griffith's Criticisms," *American City*, 40-41.
- Adams, T. S., "The Appointment and Supervision of Local Assessors," *Proceedings of the Indiana Conference on Taxation*, 1914, Indiana University Bulletin XVIII, No. 4, 121 ff.
- , "How the State of Wisconsin Improved its Local Assessment Work," *Proceedings of the New York State Conference on Taxation*, 1916, 88 ff.
- , "Method of Securing Efficient Assessments," *Proceedings of the Sixteenth Conference for Education in the South*, 1913, 175 ff.
- , "Tax Burden on Real Estate," *Review of Reviews*, Apr. 1932, 33 ff.
- , "The Value of a State Tax Commission," *Proceedings of the New York State Conference on Taxation*, 1915, 14 ff.
- , "The Wisconsin Tax Commission's Valuation of Real Estate," *Papers and Proceedings of the Minnesota Academy of Social Science*, Vol 1, No 1, 1908, 79 ff.
- Aldis, Graham, "Real Estate and Taxes," *Current History*, Feb. 1934, 513 ff.
- Babcock, F. M., "Common Errors in Appraisal Method—An Analysis," *National Real Estate Journal*, Nov 24, 1930, 17 ff.
- , *The Appraisal of Real Estate*, Macmillan, New York, 1924.
- , *The Valuation of Real Estate*, McGraw-Hill, New York, 1932.
- Babcock Henry A., "Recent Development in Real Estate Appraising," *National Real Estate Journal*, Apr. 14, 1930, 31 ff.
- Bailey, William, "State Equalization: How the Board Should Be Constituted and Information Secured" *Proceedings of the National Tax Association*, 1916, 405 ff.
- Ballinger, Roy A. and Coombs, W., *Taxation on Farm and Urban Real Estate in Virginia*, Virginia Agricultural Experiment Station Bulletin 268, Sept. 1929, 26 ff.
- Barnes, O. F., "How Can Reassessment Statutes Be Administered without Causing a Political Upheaval?" *Proceedings of the National Tax Association*, 1917, 296 ff.

- Barrows, George E., "Appraisal and Assessment of Property for Purposes of Taxation," *Proceedings of the New York State Conference on Taxation*, 1928, 107 ff.
- Bernard, A. D., *Principles and Practices of Real Estate Valuation*, United States Fidelity and Guaranty Co., Baltimore, 1913.
- Blachly, F. E. and Oatman, M. E., *Some Problems in Oklahoma Finance*, Oklahoma Bureau of Municipal Research, Studies in Government and Administration No. 4, Nov. 1, 1924, 79 ff.
- Black, Albert G. and Black, John D., "The Principles Involved in Farm-Land Appraisal for Loan Purposes," *Journal of Land and Public Utility Economics*, Oct. 1926, 396 ff.
- Blakey, Roy G., *Report on Taxation in West Virginia*, Jarrett, Charleston, 1930, ch. v.
- , *Taxation in Minnesota*, University of Minnesota Studies in Economics and Business No. 4, 1932, chs. 3 and 7.
- Blough, J. Roy, "Recent Developments in Methods of Real Estate Equalization in Wisconsin," *Journal of Land and Public Utility Economics*, May 1934, 137 ff.
- Boeckh, E. H., "An Analytic Method of Appraising for Mortgage Loan Purposes," *Real Estate Record and Builders' Guide*, Nov. 28, 1931, 5 ff.
- Bonbright, J. C., "May the Same Property Have Different Values for Different Purposes?," *Proceedings of the National Tax Association*, 1927, 279 ff.
- , "The Valuation of Real Estate for Tax Purposes," *Columbia Law Review*, Vol. XXXIV, No. 8, Dec. 1934, 1397 ff.
- Brannen, C. O., *The Farm Tax Problem in Arkansas*, Arkansas Agricultural Experiment Station Bulletin 223, Feb. 1928, 24 ff.
- Brent, W. L., "Valuing Industrial Real Estate," *Proceedings of the National Association of Real Estate Boards, Industrial Property Division*, 1924, 23 ff.
- Brindley, John E., "The County Assessor and Tax Commission System," *Proceedings of the National Tax Association*, 1912, 407 ff.
- , "State Supervision of County Assessment and Taxation," *Annals of the American Academy of Political and Social Science*, Vol. XLVII, May 1913, 213 ff.
- Brindley, Willis, "Retail Rentals as a Guide to Real Estate Values," *National Real Estate Journal*, Aug. 17, 1931, 19 ff.
- Brown, H. G., "Taxing Rental vs. Taxing Salable Value," *Journal of Political Economy*, Feb. 1928, 164 ff.
- Brown, J. T., "Cooperation of the County Assessors and Tax Commission," *Proceedings of the National Tax Association*, 1914, 33 ff.
- Brown, Norbert, "Real Estate Tax Relief Obtained in Many States," *Real Estate Record and Builders' Guide*, Apr. 22, 1933, 6 ff.
- Buck, A. E., "Noteworthy Assessing and Tax Billing Procedure in a Small Town," *American City*, Feb. 1930, 175 ff.

- Bullock, C. J., "The Increase of Taxes on Real Estate in American Cities," *Harvard Business Review*, Jan. 1928, 129 ff.
- Burke, W. J., "The Listing and Valuation of Real Estate in the City of Buffalo, New York," *Proceedings of the National Tax Association*, 1924, 212 ff.
- Burnette, J. A., "The Classification of Real Estate," *Proceedings of the Third Biennial Conference Convention of the Tax Commission and the County Assessors of Kansas*, Dec. 19-20, 1911, 10 ff.
- Burr, Hudson, "A New Approach to Rural Appraising," *Journal of the American Institute of Real Estate Appraisers*, Jan. 1935, 155 ff.
- Burton, John E., "Building Obsolescence and the Assessor," *Journal of Land and Public Utility Economics*, May 1933, 109 ff.
- Burton, John E., "Modifying and Supplementing the General Property Tax—Annual Value Considered as a Base for Real Estate Taxes," *Proceedings of the National Tax Association*, 1934, 55 ff.
- Carlson, S. A., "More Equitable Taxation by Scientific Assessment of Real Estate," *American City*, Oct. 1926, 497 ff.
- Casey, J. J., "Cambridge System of Real Estate Valuations," *Bulletin of the National Tax Association*, Mar. 1925, 184 ff.
- Chamber of Commerce of the United States, Finance Department, Committee on State and Local Taxation and Expenditures:
 No. 1, *Local Fiscal Problems*, May 1928.
 No. 2, *Fiscal Problems of the States*, May 1928.
 No. 7, *The Financial Administration of Governments*, July 1929
 No. 8, *Assessments*, Nov. 1930
- Clark, H. F., *Appraising the Home*, Prentice-Hall, New York, 1930.
- Clarke, G. B. and Jesness, O. B., *A Study of Taxation in Minnesota with Particular Reference to Assessments of Farm Lands*, Minnesota Agricultural Experiment Station Bulletin 277, Aug. 1931.
- Cleminshaw, J. M., *Appraisers Manual*, 1932.
- , "Obsolescence and the Taxable Valuation of Manufacturing Property," *Bulletin of the National Tax Association*, Oct. 1927, 18 ff.
- , "Real Estate Values and Taxation," *American City*, Mar. 1934, 67 ff.
- Clow, F. R., "The St. Paul Method of Assessing Real Estate," *Journal of Political Economy*, Dec. 1896, 71 ff.
- Collins, Clem W., "Assessment of City Real Estate," *Proceedings of the National Tax Association*, 1926, 85 ff.
- Compton, R. T., "Romance and Reality. The Law and Practice of General Property Tax Assessment in Ohio," *The Tax Magazine*, Dec. 1931, 434 ff.
- Connelly, W. F., "The Valuation of Industrial and Commercial Properties for Taxation," *Proceedings of the National Tax Association*, 1927, 295 ff.

- Coody, A. S., "The Local Assessor and his Functions," *Proceedings of the National Tax Association*, 1925, 75 ff.
- Coombs, Whitney, *Taxation of Farm Property*; United States Department of Agriculture Technical Bulletin 172, Feb. 1930.
- Coombs, W., Moorhouse, L. A., and Seeley, B. D., *Some Colorado Tax Problems with Especial Reference to their Effect on Agriculture*, Colorado Agricultural Experiment Station Bulletin 346, Sept. 1928, 40 ff.
- Cornick, Philip H., "Assessment of Property for Taxation," constituting chap. xi of Buck, A. E., *Municipal Finance*, Macmillan, New York, 1926.
- , "The Going Value of Real Estate," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII: Part I, Mar. 1930, 177 ff.
- , "How to Assess Real Estate on its Income," *Public Management*, Feb. 1934, 52 ff.
- , "Taxes and Assessments," *Public Administration*, Jan. 1932, 11 ff.
- Cotton, A. H., "Uniform Standard of Card System and Maps," *Bulletin of the National Tax Association*, Jan. 1927, 99 ff.
- Crossen, E. P., *Taxation and Public Finance in South Dakota*, South Dakota Agricultural Experiment Station Bulletin 232, June 1928, 23 ff.
- Daugherty, M. M., *The Assessment and Equalization of Real Property in Delaware*, Delaware Agricultural Experiment Station Bulletin 159, Dec. 1928.
- , "Review of Current Farm Taxation Research," *Farm Economics*, July 1933, 531 ff.
- Donehoo, J. C., "Scientific Assessing of Property for Taxation," *Public Management*, Mar. 1934, 83 ff; May 1934, 144 ff.
- Dreesen, W. H., *A Study in the Ratios of Assessed Values to Sales Values of Real Property in Oregon*, Oregon Agricultural Experiment Station Bulletin 233, June 1928.
- , "The Valuation of Farm Real Property for Taxation," *Proceedings of the Second International Conference of Agricultural Economics*, 1930, 246 ff.
- Du Bois Ayers J., "Theoretical Versus Practical Appraising," *Journal of the American Institute of Real Estate Appraisers*, Apr. 1933, 200 ff.
- Eldridge, J. G. and Durrance, O. L., *The Assessment of Real Estate for Purposes of Taxation: A Study in Local Taxation*, University of Florida, Bureau of Economic and Business Research, Economic Series, Vol. 1, No. 1, Oct. 1930.
- Ely, Richard T., "The Taxation of Land," *Proceedings of the National Tax Association*, 1921, 228 ff.
- , "Taxing Land Values and Taxing Building Values," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII: Part I, Mar. 1930, 165 ff.
- Emerson, C. M., "Aerial Surveying as Applied to Tax Equalization," *American City*, Apr. 1927, 522 ff.

- England, Eric, *Assessment and Equalization of Farm and City Real Estate in Kansas*, Kansas Agricultural Experiment Station Bulletin 232, July 1924.
- Erskine, R. C., "Two Dreams and a Plain Appraisal," *National Real Estate Journal*, Sept. 1934, 27 ff.
- Eveland, H. L., "The Valuation and Assessment of Farm Lands," *Proceedings of the National Tax Association*, 1924, 201 ff.
- Fairchild, S. M., "Aerial Photographs Aid Tax Assessors," *National Municipal Review*, July 1926, 403 ff.
- Fairweather, George O., "Conditions for Equitable Taxation of Real Estate," National Association of Real Estate Boards, *Annals of Real Estate Practice* 1928, 986 ff.
- Fales, A. B., "State Supervision of Local Assessments," *Bulletin of the National Tax Association*, Feb. 1918, 119 ff.
- Fellows, W. B., "How May Reassessment Statutes Be Effectively Administered without Causing a Political Upheaval?" *Proceedings of the National Tax Association*, 1917, 317 ff.
- Fisher, E. M., "Farm Land Appraisal Practice," *Proceedings of the National Association of Real Estate Boards, Farm Lands Division*, 1924, 87 ff.
- , "Real Estate and the Business Cycle," *National Real Estate Journal*, Nov. 30, 1925, 13 ff.
- , "Valuing Farms with Facts," *National Real Estate Journal*, June 1, 1925, 48 ff.
- Fisher, Oscar, "Application of Relative Factor Ratings in Land Evaluation," *Real Estate Record and Builders' Guide*, July 28, 1934, 6 ff.
- Gabbard, L. P., *Inequalities in Taxation of Farm Lands and City Property Due to Scope and Method of Assessment*, Texas Agricultural Experiment Station Bulletin 458, Sept. 1932.
- Gaddis, P. L., "Appraising Farm Lands for Loan Purposes," National Association of Real Estate Boards, *Annals of Real Estate Practice*, Vol. V, 1927, 198 ff.
- Gay, L. W., "The Cubic Foot Method of Determining the Value of Residence Property," National Association of Real Estate Boards, *Annals of Real Estate Practice*, 1926, Vol. II, 363 ff.
- Gilbert, Harry E., "Valuation of Real Estate for Purposes of Taxation," *National Real Estate Journal*, Oct. 1932, 32 ff.
- Gillson, P. Y., Address at Conference of County Commissioners, *Nevada Tax Review*, No. 30, Feb. 1932, 5.
- Gitterman, A. N., "New Influence on New York City Values," *Real Estate Record and Builders' Guide*, Sept. 17, 1932, 6 ff.
- , "Pointed Suggestions on Appraisals," National Association of Real Estate Boards, *Annals of Real Estate Practice*, Vol. I, 1927, 251 ff.
- Goldfogle, Henry M., "Equitable Assessments for Taxation Purposes," *Proceedings of the New York State Conference on Taxation*, 1926, 104 ff.
- Graves, Mark, "Equalization of Assessments," *Proceedings of the New York State Conference on Taxation*, 1928, 132 ff.

- Griffith, E. S., "The Crisis in the Property Tax. Is the British System the Answer?" *American City*, Oct. 1933, 39-40.
- , "A Rejoinder" [to Dr Thomas Adams *re* the British system of real property taxation,] *American City*, Oct. 1933, 41.
- Glover, Charles P., *A Technique of Appraisals of City Land Values*, Florida Association of Real Estate Boards, Jacksonville, 1925.
- Groves, H. M., "Property Tax Institutions in Wisconsin," *Bulletin of the National Tax Association*, Dec. 1933, 73 ff.
- Gulick, Luther, "The Assessors' Record Card," *National Municipal Review*, July 1924, 355 ff.
- , "Simplification in State Administration as Effecting Efficiency in the Assessment of Property and the Tax Commission Movement," *Proceedings of the National Tax Association*, 1923, 263 ff.
- Haas, G. C., "Assessment of Farm Real Estate," *Proceedings of the National Tax Association*, 1923, 63 ff.
- , *Sales Prices as a Basis for Farm Land Appraisal*, Minnesota Agricultural Experiment Station Technical Bulletin No. 9, Nov. 1922.
- Haig, Robert M., "Taking the Burden from Real Estate," *Bulletin of the National Tax Association*, Nov. 1932, 34 ff.
- , *The Exemption of Improvements from Taxation in Canada and the United States*, A Report Prepared for the Committee on Taxation of the City of New York, 1915.
- , *Some Probable Effects of the Exemption of Improvements from Taxation in the City of New York*, A Report Prepared for the Committee on Taxation of the City of New York, 1915.
- Hammar, C. H., *The Accuracy and Flexibility of Rural Real Estate Assessment in Missouri*, Missouri Agricultural Experiment Station Research Bulletin 169, June 1932.
- Hammond, Mathew B., "Cooperation between State and Local Authorities in the Assessment of Real Estate," *Proceedings of the National Tax Association*, 1908, 113 ff.
- Hammond, R. E., "Rebuilding Utah's Tax System," *Proceedings of the National Tax Association*, 1933, 63 ff.
- Hecht, Lee I., "Appraising for Taxation of Real Estate," *National Association of Real Estate Boards, Annals of Real Estate Practice*, 1928, 143 ff.
- Henderson, James D., *Real Estate Appraising. A Practical Work on Appraising and Appraisal Methods*, Banker and Tradesman, Cambridge, 1931.
- , "Do Sales Prove Value?" *National Real Estate Journal*, Sept. 14, 1931, 21 ff.
- Heydecker, Edward L., "Assessment in the Cities," *Proceedings of the New York State Conference on Taxation*, 1911, 155 ff.
- , "Tax Maps," *Proceedings of the New York State Conference on Taxation*, 1912, 339 ff.
- Hobbs, S. H. Jr., "Property Taxation in North Carolina," *Taxation in North Carolina*, University of North Carolina Extension Bulletin Vol. XII, No. 4, Nov. 1932, 30 ff.

- Holcomb, A. E., "Simplicity and Directness the Remedies for Present Conditions with Regard to the Assessment and Collection of Taxes in New York," *Proceedings of the New York State Conference on Taxation*, 1913, 206 ff.
- Hooker, John P., "Correct Appraisal Methods," *National Association of Real Estate Boards, Annals of Real Estate Practice*, Vol. I, 1927, 174 ff.
- Hormell, O. C., *Maine Towns*, Bowdoin College, Bureau of Research in Municipal Government, Publication No. 9, 1932, 70 ff.
- Howe, S. T., Burnette, J. A. and Milton, B. F., "Classification of Real Estate," *Proceedings of the National Tax Association*, 1912, 355 ff.
- Hughes, E. A., Address delivered at the Twenty-Fourth Annual Convention of the Arizona Cattle Growers' Association, *Arizona Taxpayers' Magazine*, March 1930.
- James, A. E., "The Cost and the Simplification of Tax Administration," *Proceedings of the National Tax Association*, 1915, 188 ff.
- Jennett, C. B., "Farm Appraisals," National Association of Real Estate Boards, *Annals of Real Estate Practice*, 1929, 97 ff; 1930, 153 ff.
- Jensen, Jens P., *Property Taxation in the United States*, University of Chicago Press, 1931.
- , *Survey of Colorado State Tax System* (Made under the Auspices of the Denver Chamber of Commerce), 1930, 53, 86-87.
- Jess, F. B., "State Supervision of Local Assessments," *Annals of the American Academy of Political and Social Science*, Vol. LXXXV, May 1921, 269 ff.
- Johnson, Griff, "The Appraisal of Iowa Farm Land Values by an Insurance Company," *Journal of Land and Public Utility Economics*, Oct. 1926, 392 ff.
- Kellogg, Charles E., "A Method for the Classification of Rural Lands for Assessment in Western North Dakota," *Journal of Land and Public Utility Economics*, Feb. 1933, 10 ff.
- Kendrick, M. Slade, "A Comparison Between Urban and Rural Taxation on Real Estate Values," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII, Mar. 1930, 225 ff.
- , *Taxation in Connecticut*, Storrs Agricultural Experiment Station Bulletin 166, Sept. 1930, 154 ff.
- , *Taxation Issues*, Harpers, 1933, ch. iii.
- Kennedy, John P., *The Basis of Real Estate Values*, Bank Business Builders Associates, Los Angeles, 1925.
- King, W. I., *The Valuation of Urban Realty for Purposes of Taxation*, Bulletin of the University of Wisconsin, Economic and Political Science Series Vol. 8, No. 2, Apr. 1914.
- Kniskern, P. W., "Practical Suggestions for Appraising Homes," National Association of Real Estate Boards, *Annals of Real Estate Practice*, Vol. I, 1927, 186 ff.

- Kniskern, P. W., *Real Estate Appraisal and Valuation*, Ronald, New York 1933.
- Krueger, L. B., "The Classification of Farm Lands for Assessment Purposes in Wisconsin," *Journal of Land and Public Utility Economics*, May 1932, 113 ff.
- Kuehl, E. G., "Appraisals," *Proceedings of the National Association of Real Estate Boards, Farm Lands Division*, 1924, 98 ff.
- Kuehne, Walter R., "A New Approach to Urban Land Valuation," *Journal of the American Institute of Real Estate Appraisers*, Apr. 1933, 189 ff.
- Kunkle, J. D., "Units of Industrial Property Values," *National Real Estate Journal*, Apr. 19, 1926, 45 ff.
- Lambrecht, R. G., "Basis of Real Estate Values," *National Real Estate Journal*, Apr. 4, 1927, 37 ff.
- Lee, Virgil P., "Some Defects of Current Sale Value as the Basis for Appraisal," *Journal of Land and Public Utility Economics*, Nov. 1930, 337 ff.
- Leland, S. E., "Assessments in Time of Depression," *Proceedings of National Tax Association*, 1933, 323 ff.
- , "The Real Estate Tax: Capitalization and Benefit," *Bulletin of the National Tax Association*, May 1933, 227 ff.
- , "Tax Problems and a Tax Program for Real Estate," National Association of Real Estate Boards, *Annals of Real Estate Practice*, 1930, 432 ff.
- , "Valuing Buildings for Taxation," *National Real Estate Journal*, Nov. 12, 1928, 527 ff.
- Leser, Oscar, "Full Value Standard," *Bulletin of the National Tax Association*, Oct. 1917, 19 ff.
- , "Problems of Local Administration," *Proceedings of the National Tax Association*, 1908, 527 ff.
- Linder, Thomas, "Property Valuations and the Tax Assessor," *Bulletin of the National Tax Association*, June 1924, 271 ff.
- Link, D. M., "Term, Salary and Method of Selecting Assessors," *Proceedings of the National Tax Association*, 1913, 40 ff.
- Litsinger, E. R., "Plan for the Valuation of Land," *Proceedings of the National Tax Association*, 1924, 220 ff.
- Long, H. F., "The Assessor and the General Property Tax," *Bulletin of the National Tax Association*, June 1927, 261 ff.
- Lord, Samuel, "How May Reassessment Statutes be Administered Without Causing a Political Upheaval?" *Proceedings of the National Tax Association*, 1917, 324 ff.
- Lutz, H. L., "The Somers System of Realty Valuation," *Quarterly Journal of Economics*, Vol. XXV, 172 ff.
- , "State Supervision of Local Finance," *Journal of Political Economy*, June 1935, 289 ff.
- , *The State Tax Commission*, Harvard Economic Studies, Vol. XVII, 1918.
- , "The State Tax Commission and the Property Tax," *Annals of the American Academy of Political and Social Science*, Vol. XCV, 276 ff.

- Lutz, H. L., "What Should a Permanent Tax Commission Do?," *California Tax Digest*, Mar. 1928, 80 ff.
- MacCracken, John H., "Taxation of City Real Estate and Improvements on Real Estate as Illustrated in New York City," *Proceedings of the National Tax Association*, 1907, 375 ff.
- Martin, J. W. and Stephenson, C. M., "Aspects of the Movement Toward Separation of Sources of State and Local Revenue," *The Tax Magazine*, Jan. 1933, 11 ff; Feb 1933, 58 ff.
- Maxcy, Chas V., "Mechanization of Tax Assessments and Collections," *The New York Certified Public Accountant*, Oct. 1934, 3 ff.
- McCarthy, E. A., "More Equitable Tax Assessments for Rich and Poor," *American City*, Dec. 1930, 137 ff.
- McMichael, S. L., "New Problems for the Appraisers," *Journal of the American Institute of Real Estate Appraisers*, July 1933, 356 ff.
- Merchant, C. H. and Parsons, M. S., *Farm Property Taxation in Maine*, Maine Agricultural Experiment Station Bulletin 366, June 1933, 248 ff.
- Mertzke, A. J., "Appraising Properties in Districts Shifting in Use," *National Real Estate Journal*, May 26, 1930, 57 ff.
- , "The Capitalization Rate of Income Property Appraisals," *Real Estate Record and Builders' Guide*, Jan. 7, 1933, 3 ff.
- , "Division of Value Between Land and Improvements," *National Real Estate Journal*, Mar. 17, 1930, 62 ff.
- , "Real Estate Appraisal Practices," *Journal of the American Institute of Real Estate Appraisers*, July 1933, 298 ff.
- Miller, G. P., "Correcting Abuses in Local Tax Methods," *American City*, July 1927, 105 ff.
- Mills, W. H., *The Taxation System of South Carolina*, South Carolina Agricultural Experiment Station Bulletin 231, Sept. 1926, 36 ff.
- Mitchell, Mathew C., *Assessment of Real Estate Values in American Cities*, Ph. D. Thesis, Harvard University, 1927.
- Moore, H. R., *Taxation as Related to the Property and Income of Ohio Farms*, Ohio Agricultural Experiment Station Bulletin 459, Sept. 1930, 84 ff.
- Morrison, Fred, "Property Taxes and Property Tax Relief in North Carolina," *Taxation in North Carolina*, University of North Carolina Extension Bulletin, Vol XII, No. 4, Nov. 1932, 35 ff.
- Murray, Timothy, "Equitable Assessment for Taxation Purposes," *Proceedings of the New York State Conference on Taxation*, 1926, 111 ff.
- , "Local Valuations and Assessments," *Bulletin of the National Tax Association*, Mar. 1926, 169 ff.
- National Association of Real Estate Boards, *Real Estate Appraising*, 1927.

- National Association of Real Estate Boards "Report of the Appraisal Committee of the Industrial Property Division," *Annals of Real Estate Practice*, Vol. IV, 1927, 183 ff.
- National Industrial Conference Board, *The Fiscal Problem in Missouri*, New York 1930, ch. vi.
- National Industrial Conference Board, *State and Local Taxation of Property*, New York, 1930.
- Nelson, R. W. and Mitchell, G. W., *Assessment of Real Estate in Iowa and Other Mid-Western States*, State University of Iowa, College of Commerce, Bureau of Business Research, Iowa Studies in Business No. 10, Jan. 1931.
- Newton, R. W. and Hedrick, W. O., *Farm Real Estate Assessment Practices in Michigan*, Michigan Agricultural Experiment Station Special Bulletin 172, Feb. 1928
- Newton, R. W. and Benton, A. H., *Some Tax Problems of North Dakota Farmers*, North Dakota Agricultural Experiment Station Bulletin 203, Oct. 1926, 57 ff.
- Newton, R. W., "State Supervision and Equalization of Local Assessments," *Proceedings of the National Tax Association*, 1928, 328 ff.
- Nichols, P., "Valuation of Industrial Properties for Tax Purposes," *Proceedings of the New York State Conference on Taxation*, 1928, 91 ff.
- Olson, Lyle H., "The Value of Appraisals and their Use for Sales and Tax Purposes," *Proceedings of the Convention of the National Association of Building Owners and Managers*, 1925, 206 ff.
- Opdyke, J. B., "Benefits of a Tax Map to a Municipality," *American City*, Mar. 1933, 60 ff.
- Orbison, C. J., "The Township Assessor," *Proceedings of the National Tax Association*, 1916, 58 ff.
- Page, Thomas W., "Simplification in State Administration as Affecting Efficiency in the Assessment of Property and the Tax Commission Movement," *Proceedings of the National Tax Association*, 1923, 269 ff.
- Parish, Thomas A., "Assessors and Assessments," *Proceedings of the National Tax Association*, 1909, 333 ff.
- Peckinpough, A. B., "Operation of New Centralized Tax Law In Ohio," *Proceedings of the National Tax Association*, 1914, 127 ff.
- Phelan, Raymond V., "Centralized Tax Administration in Minnesota and Wisconsin," *Proceedings of the National Tax Association*, 1907, 97 ff.
- Plehn, Carl C., "An Ideal System of State and Local Taxation," *Taxation in Washington*, Papers and Discussions of the State Tax Conference at the University of Washington, May 27-29, 1914, Bulletin of the University of Washington, ex ser. No. 12, 209 ff.

- Plehn, Carl C., "Taxation and Office Building," *Proceedings of the Convention of the National Association of Building Owners and Managers*, 1926, 293 ff.
- Pleydell, A. C., Discussion on the Somers System, *Proceedings of the National Tax Association*, 1913, 267 ff.
- , *The Use of Standards in Real Estate Assessment*, New York Tax Reform Association, New York, 1910.
- Pollock, W. W., and Scholz, K. W. H., *The Science and Practice of Urban Land Valuation*, The Manufacturers' Appraisal Co., Philadelphia, 1926
- , "An Equitable Standard for Land Valuation," *Proceedings of the National Tax Association*, 1913, 234 ff.
- Pomroy, George E., "Taxation of Buildings in Business Districts and Work of a Valuation Committee in the Assessment of Real Estate," *Proceedings of the National Tax Association*, 1912, 347 ff.
- Porter, Lester W., "The Technique of Appraising Industrial Real Estate, National Association of Real Estate Boards, *Annals of Real Estate Practice*, 1928, 706 ff.
- Potter, Arthur F., "The Single Assessor vs. the Board of Assessors in Administering Ad Valorem Taxes," *Bulletin of the National Tax Association*, Apr. 1929, 195 ff.
- Powell, H. M., *Reducing Realty Taxes*, Boyd Press, New York, 1st ed. 1928; 2nd ed 1933.
- Powers, L. G., "Uniform Listing of Real Estate," *Proceedings of the National Tax Association*, 1909, 321 ff.
- Pratt, Louis M., "Relation of Commodity Prices to Real Estate Values," *National Real Estate Journal*, June 1932, 35 ff.
- Prouty, W. L., Collins, Clem, and Prouty, F. H. *Appraisers' and Assessors' Manual*, McGraw-Hill, New York, 1930.
- Purdy, Lawson, "The Assessment of Real Estate," *Proceedings of the Sixteenth Conference for Education in the South*, held at Richmond, Virginia, Apr. 15-18, 1913, 182 ff.
- , "The Assessment of Real Estate," National Municipal League, *Technical Pamphlet No. 1*, 3rd ed., 1923.
- , "The Assessment of Property for Taxation," *Publications of the American Economic Association*, Third Series, Vol. XI, 1910, 361 ff.
- , "City Real Estate Assessment," *Proceedings of the National Tax Association*, 1908, 237 ff.
- , "Real Estate Assessments," *Proceedings of the New York State Conference on Taxation*, 1916, 27 ff.
- Raper, C. L., "Frequency of Assessment," *Proceedings of the National Tax Association*, 1913, 51 ff.
- Rawles, W. A., "Classification of Land for Purposes of Taxation," *Proceedings of the Indiana Conference on Taxation*, 1914, Indiana University Bulletin XVII, No. 4, 137 ff.
- Readey, J. C., "A New Plan for Grading the Loan Value of Farms," *National Real Estate Journal*, May 1933, 35 ff.
- Reed, O. O., "Appraising Farm Lands," *National Real Estate Journal*, Oct. 1933, 55 ff.

- Reeves, Cuthbert E., *Appraising Residential Property*, Buffalo, 1934.
- , *The Appraisal of Urban Land and Buildings. A Working Manual for City Assessors*, Public Administration Service Publication No. 11, 1928.
- , "Land Value Maps," *Proceedings of the New York State Conference on Taxation*, 1930, 31 ff.
- "Report of Committee on Administration of Laws for Taxation of Property," (Samuel Lord, Chairman) *Proceedings of the National Tax Association*, 1911, 363 ff.
- "Report of Committee on Assessment of Real Estate" (T. C. Townsend, Chairman), 1911, 345 ff.
- "Report of Committee on Method of Selecting Assessors" (Samuel Lord, Chairman), *Proceedings of the National Tax Association*, 1915, 197 ff.
- "Report of the Committee on Uniform Classification of Real Estate" (T. C. Townsend, Chairman), *Proceedings of the National Tax Association*, 1910, 313 ff.
- Reynolds, Samuel T., "Appraisal and Assessment of Property for Purposes of Taxation," *Proceedings of the New York State Conference on Taxation*, 1928, 112 ff.
- Rifkind, S. H., "What is Fair Value in Taxation?" *Proceedings of the National Tax Association*, 1926, 305 ff.
- Rockfeller, Lewis K., "Cooperation and Standardization in Local Assessments," *Proceedings of the New York State Conference on Taxation*, 1920, 87 ff.
- Rosa, C. D., "Civil Works Administration Assistance in Wisconsin Property Tax Assessment," *Bulletin of the National Tax Association*, Feb. 1934, 130 ff.
- Round Table Discussion on the Problems of the Local Assessor, *Proceedings of the National Tax Association*, 1920, 363 ff.
- Rowlands, D. T., "Commonly Accepted Evidences of Real Estate Value for Purposes of Taxation," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII, 1930, 88 ff.
- Saxe, Martin, "Centralized Tax Administration," *Proceedings of the New York State Conference on Taxation*, 1924, 70 ff.
- , "A Plea for County Plan of Tax Administration," *Proceedings of the New York State Conference on Taxation*, 1917, 73 ff.
- Scholz, Karl, "Inadequacy of Actual Selling Price of Real Estate as Evidence of Fair Present Value for Purposes of Taxation," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII, Part I, 1930, 157 ff.
- Scott, C., "Tax Maps, Record Cards, and Land Value Maps," *American City*, May 1926, 539 ff.
- Shipley F. B., "Is Real Estate Taxed Excessively and Inequitably," *Real Estate Record and Builders' Guide*, Dec. 10, 1932, 3 ff.

- Shipley, F. B., "An Examination of Over-Assessment in Manhattan," *Real Estate Record and Builders' Guide*, Dec. 17, 1932, 3 ff.
- Shultz, *American Public Finance and Taxation*, Prentice-Hall, New York, 1931, chs. xxi, xxii and xxiii.
- Silverherz, J. D., "A Brief History of Real Estate Assessment in New York City," *Real Estate Record and Builders' Guide*, July 18, 1931.
- , "A Consideration of Assessment Methods in New York City," *Real Estate Record and Builders' Guide*, July 25, 1931, 5 ff.
- Simpson, Herbert D., *Tax Racket and Tax Reform in Chicago*, The Institute for Economic Research, 1930.
- , *The Tax Situation in Illinois*, Studies in Public Finance of the Institute for Research in Land Economics and Public Utilities, Research Monograph No. 1, 1929.
- , "The Incidence of Real Estate Taxes," *American Economic Review*, June 1932, 219 ff.
- Simpson, H. D. and Burton, J. A., *The Valuation of Vacant Land in Suburban Areas*, The Institute for Economic Research, 1931.
- Sims, Fred A., "Divorcing the Assessor from Politics," *Proceedings of the National Tax Association*, 1916, 88 ff.
- Somers, W. A., "Valuation of City Real Estate for Taxation," *Municipal Affairs*, 1901, 400 ff.
- , *The Valuation of Real Estate for the Purpose of Taxation*, St. Paul, 1901.
- , "The Valuation of Real Estate for Taxation," *National Municipal Review*, Vol II, No. 2, 1913, pp 230-238.
- Southwick, C. E., "Farm Values and Farm Appraisals," *National Real Estate Journal*, Feb. 26, 1923, 19 ff.
- Spengler, Edwin H., "The Real Estate Tax: Capitalization and Benefit—A Reply" [to Prof. Simeon E. Leland] *Bulletin of the National Tax Association*, May 1933, 232 ff.
- Stauffer, W. H., *Taxation in Virginia*, University of Virginia Institute for Research in the Social Sciences, Institute Monograph No. 13, 1931, 70 ff.
- Stevenson, G. H., "Factors in Farm Land Appraising," *National Real Estate Journal*, July 16, 1923, 34 ff.
- Stroheker, F. S., "Factors in Farm Land Appraisals," *Proceedings of the National Association of Real Estate Boards, Farm Lands Division*, 1924, 77 ff.
- Sutton, G. W., "Full Value Assessments," *Bulletin of the National Tax Association*, Nov. 1920, 43 ff.
- Swan, Herbert S., "Land Values and City Growth," *Journal of Land and Public Utility Economics*, May 1934, 188 ff.
- Thompson, R. L. and Allin, B. W., *Louisiana Farm Taxes*, Louisiana Agricultural Experiment Station Bulletin 231, Part II, May 1933, 17 ff.
- Thorson, Ivan A., "Appraisal Methods in Times of Depression," *Proceedings of the National Tax Association*, 1933, 310 ff.
- , "Relation of Value to the Purpose of the Appraisal," *Journal of the American Institute of Real Estate Appraisers*, Jan. 1933, 104 ff.

- Tobin, Charles J., "Uniform Date of Assessment," *Proceedings of the New York State Conference on Taxation*, 1919, 220 ff.
- Todd, Edwin S., "The Taxation of Real Estate," *The Tax Magazine*, Oct. 1934, 533 ff.
- Townsend, T. C., "State Supervision of Assessments," *Proceedings of the National Tax Association*, 1909, 345 ff.
- Tunell, G. E., "Value for Taxation and Value for Rate Making," *Proceedings of the National Tax Association*, 1927, 263 ff.
- Upham, N. J., "The Real Measure of Front Foot Values," *National Real Estate Journal*, Aug. 6, 1928, 27 ff.
- Van Sickle, J. V., "Classification of Land for Taxation," *Quarterly Journal of Economics*, Nov. 1927, 94 ff.
- , "Taxation of Land in Austria," *Journal of Land and Public Utility Economics*, April 1925, 215 ff.
- Walker, W. P., and DeVault, S. H., *Taxation in Maryland with Special Reference to Agriculture*, Maryland Agricultural Experiment Station Bulletin 339, Dec. 1932, 273 ff.
- Wallace, Henry A., "Comparative Farm-Land Values in Iowa," *Journal of Land and Public Utility Economics*, Oct. 1926, 385 ff.
- Weaver, F. P., *The Rural Tax Problem in Pennsylvania*, Pennsylvania State College Bulletin 263, March 1931, 18 ff.
- , "Rural Taxation in Pennsylvania," Part I of *Some Phases of Taxation in Pennsylvania*, Pennsylvania Department of Agriculture, *General Bulletin* 437, Dec. 15, 1926, 1-25.
- Webb, J. A., "Basic Factors in Making Appraisals," *National Real Estate Journal*, Feb. 26, 1923, 23 ff.; Mar. 12, 1923, 21 ff.; Mar. 26, 27 ff.
- Wells, Alden, "Property Maps—Their Preparation, Use and Cost," *American City*, Sept. 1928, 108 ff.
- Wiecking, E. H., "Factors Determining the Value of Farm Real Estate in the United States," *Proceedings of the Second International Conference of Agricultural Economists*, 1930, 1012 ff.
- , "Farm Real Estate Values and Farm Income," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII: Part I, March 1930, 233 ff.
- Woodbury, E. E., "Assessment in Rural Districts," *Proceedings of the New York State Conference on Taxation*, 1911, 131 ff.
- , "Work and Problems of Tax Commissions," *Proceedings of the National Tax Association*, 1908, 457 ff.
- Woodruff, J. T., "Springfield, Mass., Uses Zoning as a Basis for Assessment," *American City*, Feb. 1933, 65 ff.
- Wyckoff, V. J., "Local Taxation in Maryland," *Bulletin of the National Tax Association*, May 1934, 232 ff.
- Yount, Hubert W., *Farm Taxation and Assessments in Massachusetts*, Massachusetts Agricultural Experiment Station Bulletin 235, Apr. 1927, 90 ff.
- , "Taxation of Farm Values," *Bulletin of the National Tax Association*, Jan. 1927, 95 ff.

- Young, Allyn A., "Central and Local Co-Operation in Tax Administration," *New York State Conference on Taxation*, 1915, 212 ff.
- Zangerle, John A., "Advantages of Standardized Assessments," *American City*, Feb. 1925, 153 ff.
- , "An Analysis of Commonly Accepted Evidences of Real Estate Value for Purposes of Taxation," *Annals of Real Estate Practice of the National Association of Real Estate Boards*, 1930, 94 ff.
- , "Assessing Real Estate on its Income," *Public Management*, July 1933, 206 ff.
- , "British and American System of Real Estate Taxation Compared," *American City*, Feb. 1934, 74 ff.
- , "Lot Tables Are Essential in Realty Appraising," *National Real Estate Journal*, Nov. 11, 1929, 41 ff.
- , "Modern Tax Assessing and Collecting Administration," *Bulletin of the National Tax Association*, June 1926, 275 ff.
- , *The Principles of Land and Building Appraisals as Scientifically Applied in Cuyahoga County*, 1931-1932.
- , *Principles of Real Estate Appraising*, McMichael, Cleveland 2nd ed., 1927.
- , "Real Estate Assessments in Cities," *Proceedings of the National Tax Association*, 1923, 46 ff.
- , "What are 100 Per Cent Appraisals?," Address before the Ohio Tax Conference held at Columbus, Ohio, Feb. 16, 1928.

B. Official Publications

Alabama

Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State and County Governments of Alabama*, 1932, Vol. 4, Part III, chs. xlv, xlvi, xlvii, xlviii.

California

Final Report of the California Tax Commission, 1929, 44 ff; 89 ff; 116 ff; 145 ff.

Report of the California Tax Research Bureau, 1933, 33 ff.

Connecticut

Tax Commissioner, *Information Relative to the Assessment and Collection of Taxes*, 1928 (Taxation Document No. 232), Dec. 1928, 6 ff.

Information Relative to the Assessment and Collection of Taxes, 1930 (Taxation Document No. 238), Jan. 1931, 7 ff.

Report of the Tax Commissioner for the Biennial Period 1931 and 1932, 1932, 12 ff.

Summary of the Report of the Connecticut Temporary Commission to Study the Tax Laws of the State and to Make Recommendations Concerning their Revision, 1934, 36 ff.

Georgia

Lutz, H. L., *The Georgia System of Revenue. Its Problems and their Remedies*, Foots, Atlanta, 1930, 97 ff.

Comptroller-General's Office, *Instructions to the Tax Receivers of Georgia*, 1930-31.

Illinois

Tenth Annual Report of the Tax Commission, 1928, 46 ff.

Illinois Tax Commission, *Illinois Assessors Manual*, 1933.

Iowa

State Board of Assessment and Review, *Assessors' Manual*, 1933.

Kansas

Kansas Tax Commission, *Proceedings of the Biennial Conference Convention of the Tax Commission and County Assessors*, 1908-1928.

Kansas Tax Commission, *Revised Instructions to be Observed in the Assessment and Equalization of Property*, 1928

Kentucky

Report of the Efficiency Commission of Kentucky, "The Government of Kentucky," 1924, Part I, 227 ff.

Louisiana

Louisiana Tax Commission, *Suggestions to the Assessors and Parish Boards of Equalization for the 1935 Assessment*, 1934.

Minnesota

St. Paul. *Report of Assessor*, 1930.

Minnesota Tax Commission, *Assessors' Manual*, 1934.

Montana

Report of the Tax and License Commission to the State Board of Equalization, 1917-18, 9 ff.

Mississippi

Institute for Government Research, of the Brookings Institution, *Report on a Survey of the Organization and Administration of State and County Government in Mississippi*, 1932, chs. 3, 4, 5.

Missouri

State Tax Commission, *Assessors' Manual*, 1931.

New Hampshire

Institute for Government Research of the Brookings Institution, *Report on a Survey of the Organization and Administration of the State, County, and Town Governments of New Hampshire*, 1932, 504 ff.

New Jersey

Commission to Investigate the County and Municipal Taxation and Expenditures, *Report No. 6, The Revenue System of New Jersey*, 1931, chaps.

State Tax Department, *A Manual of Practice in Appraising Real Estate* (prepared by Cuthbert E. Reeves), 1934.

New York

Report of Special Joint Committee on Taxation and Retrenchment. Retrenchment Section, 1920. Leg. Doc't. (1920) No. 80, ch. x.

Report of the Special Joint Committee on Taxation and Retrenchment, 1923. Leg. Doc't (1923) No. 55, ch. v.

State Library, Legislative Reference Section, *Digest of Methods Used in Making Local Assessments in Cities of the United States over 30,000 Population*, 1924, (Mimeographed).

Annual Report of the State Tax Commission, 1925, 421-450.

Pond, Chester B, *Full Value Real Estate Assessments as a Prerequisite to State Aid in New York*, Special Report of the New York State Tax Commission, No. 3, 1931.

National Institute of Public Administration, "Assessment and Equalization of Real Estate for Taxation in New York," (prepared under the direction of Philip H. Cornick), Memorandum No. 3, *Report of the New York State Commission for the Revision of the Tax Laws*, 1932.

New York City. City Committee on Plan and Survey, *Recommendations and Report of the Sub-Committee on Budget Finance, and Revenue* (H. H. Lehman, Chairman; L. Rogers, H. L. McBain and R. M. Haig consultants), "The Finances and Financial Administration of New York City," 1928.

Rochester. Bureau of Municipal Research, *Report on the Assessment of Real Property in the City of Rochester*, 1921.

Westchester County. Westchester County Emergency Work Bureau, *Report on the Preparation of the Land Value Map of Westchester County*, 1933.

North Carolina

Report of the Tax Commission, 1928, Part II, chs. vii and viii

Ohio

Cuyahoga County. *1924 Assessments; Unit Value Land Maps with Building Schedules and Photographic Types* (prepared by John A. Zangerle, County Auditor).

Oklahoma

First Annual Report of the Oklahoma Tax Commission, 1931-32 17 ff.

Rhode Island

Rhode Island Tax Officials' Association, *Bulletin*, 1915 to date.

Fourteenth Report of the Board of Tax Commissioners for the Biennial Period 1931-1932, 1933, 30 ff.

Providence. Providence Governmental Research Bureau, *A Consideration of the Providence Tax Department*, Nov. 1934.

South Carolina

Report of the Joint Special Committee on Revenue and Taxation, 1921, chs. iv, vi, and vii.

Tennessee

Report of State Tax Committee, "Tennessee Taxation and Finance," 1930, 74-5.

Texas

Report of the Tax Survey Committee, Supplement to the House Journal, 41st Legislature, 443 ff.

Utah

First Biennial Report of the Utah Tax Commission, 1931-32, 9 ff.

Vermont

Biennial Report of the Commissioner of Taxes for the term ending June 30, 1928, 4 ff.

Virginia

Report of the Committee to Study the Burden of Taxes on Real Estate, House Document No. 7, 1934, 17 ff.

Washington

First Biennial Report of the Department of Taxation and Examination, 1924, 5 ff.

Report of the Washington Tax Investigation Commission, 1930, 20 ff.

Pinegree, D. and Hall, R. C., "Assessment Ratios of Rural Real Estate in Oregon and Washington," United States Forest Taxation Inquiry. *Progress Report No. 6*, Feb. 15, 1930.

Wisconsin

Cowles, H. V. and Leenhouts, J. H., *How to Assess Property in Cities and Rural Towns*, Wisconsin Tax Commission, 1914.

Legislative Reference Library, *Control over the Assessment and Reassessment of General Property Exercised by State Tax Commissions: A Digest of the Laws of All States*. (Compiled by Annie Neal) Sept. 1924. (Mimeographed.)

R. C. Hall, "Assessment Ratios of Forest Property and Other Real Estate in Wisconsin," *Progress Report of the Forest Taxation Inquiry No. 12*, Nov. 15, 1930.

Wisconsin Tax Commission, *Manual for Supervisors of Assessments, Field Statistician and Property Tax Employees of Central Office*, 1931.

Wisconsin Tax Commission, *Assessors Manual*, 1933.

Wyoming

Seventh Biennial Report of the State Board of Equalization, 1931-32, 9 ff.

Griffenhagen and Associates, Ltd., *Report Made to the Special Legislative Committee on Organization and Revenue of Wyoming*, 1933, 425 ff.

United States

Department of Commerce, Bureau of the Census, *Digest of State Laws Relating to Taxation and Revenue, 1922, 1924*.

C. Statutory Provisions Relating to State Supervision and Control Over Local Assessments, and Recent Legislation Relating to Assessment and Equalization

Alabama

Laws of 1923, No. 172.

Arizona

Revised Code of Arizona, 1928, secs. 3056-3061.

Laws of 1929, ch. 46.

Arkansas

Crawford and Moses Digest of the Statutes of Arkansas, as amended by the 1927 and 1931 Supplements, sec. 9778L.

Acts of 1929, No. 172.

Acts of 1933, No. 12.

California

Political Code of California, 1931, secs. 3669e, 3693, 3698.

Connecticut

General Statutes of Connecticut, 1930 Revision, secs. 1088, 1089, 1092, 1260.

Delaware

Laws of 1915, ch. 79.

Laws of 1917, ch. 72.

Laws of 1921, ch. 14.

Florida

Compiled General Laws of Florida Annotated, 1927, sec. 944.

Georgia

Georgia Code, 1933, ch. 92, secs. 6301-6303, 7002-7007; ch. 40, sec. 1502.

Idaho

Constitution, art. 7, sec. 12.

Laws of 1931 p. 461.

Laws of 1933, ch. 140 and ch. 146.

Illinois

Cahills' Illinois Revised Statutes, 1933, ch. 120, secs 107, 108, 117, 118.

Indiana

Burns Indiana Annotated Statutes, 1933, secs. 64-1301, 1303, 1309.

Iowa

Acts of 1929, ch. 205, secs. 1, 2, 17, 24.

Acts of 1933, ch. 119.

Acts of 1933, ch. 121.

Kansas

Revised Statutes of Kansas, Annotated, 1923, ch. 79, secs. 1401, 1404, 1411, 1413.

Kentucky

Carroll's Kentucky Statutes Annotated, 1930, sec. 4042a, 4114i-1, 12, 14, 18.

Louisiana

Louisiana General Statutes, 1932, secs. 8313, 8321.

Maine

Laws of 1931, ch. 216, art. ii, secs. 29 and 30.
Revised Statutes, 1930, ch. 12, secs. 5-7, 10, 18.

Maryland

Laws of 1929, ch. 226, secs. 166, 167, 171, 173, 174, 175.

Massachusetts

General Laws of Massachusetts, 1932, ch. 58, secs. 1-8; ch. 59, sec. 76.

Michigan

Michigan Compiled Laws, 1929, secs. 3545, 3547, 3706-3713.

Minnesota

Mason's Minnesota Statutes, 1927, secs. 2364, 2365, 2370.

Mississippi

Code of Mississippi, 1930, secs. 7009, 7010, 7016, 7017.

Missouri

Constitution art. x, sec. 18. Missouri's Statutes Annotated, 1931, secs. 9819, 9833, 9854.

Montana

Supplement to the Revised Codes of Montana, 1923-27, secs. 2122.1-2122.8.

Nebraska

Nebraska Compiled Statutes, 1929, ch. 77, sec. 1004.
Laws of 1933, ch. 130.

Nevada

Nevada Compiled Laws, 1929, secs. 4860, 6542, 6544.
Laws of 1933, ch. 176.

New Hampshire

Public Laws of New Hampshire, 1926, ch. 68, secs. 11, 12.

New Mexico

New Mexico Statutes Annotated, 1929, ch. 141, sec. 507-508.
Laws of 1929, ch. 84.
Laws of 1933, chs. 4 and 84.

New Jersey

Compiled Statutes of New Jersey, 1709-1910, 37 a-h, Supplement, 1911-1924, Taxes and Assessments, 208-371.

Public Laws, 1931, ch. 336.

Public Laws, 1931, ch. 100.

New York

McKinney's Consolidated Laws of New York, 1928, and Cumulative Supplement, 1934, Book 59, secs. 170, 171, 171d, 173, 173a, 173b.

North Carolina

Public Laws, 1933, ch. 204, secs. 200, 202.

North Dakota

Supplement to the Compiled Laws of North Dakota, Annotated, 1913-1925, secs. 2092a1, 2092a4, 2092a5, 2141a2.

Laws of 1933, ch. 199.

Ohio

Throckmorton's Annotated Code of Ohio, 1930 and Supplements, secs. 5613, 5623, 5624, 2624-1, 2, 3, 4, 9.

Oklahoma

Oklahoma Statutes, 1931, sec. 12656.

Laws of 1931, ch. 66.

Laws of 1933, H. B. No. 136.

Oregon

Oregon Code, Annotated, 1930, Title 69, secs. 401-404; 501-503.

Rhode Island

General Laws of Rhode Island, Revision of 1923, secs. 487-489.

Public Laws, 1930, ch. 1595.

South Carolina

Code of Laws of South Carolina, 1932, Civil Code, sec. 2426.

South Dakota

South Dakota Compiled Laws, 1929, sec. 6587.

Laws of 1933, ch. 186.

Tennessee

Code of Tennessee, 1932, sec. 1478.

Texas

General Laws of 1933, ch. 147.

Utah

Revised Statutes of Utah, Annotated, 1933, Title 80, ch. 5, secs. 37-51.

Laws of 1931, ch. 53.

Laws of 1933, ch. 59.

Vermont

Public Laws of Vermont, 1933, secs. 576-582.

Virginia

Virginia Code, 1930, Appendix, ch. 4, sec. 14.

Supplement, 1934, Appendix, secs. 242, 344.

Washington

Remington's Revised Statutes of Washington, Annotated, 1931, secs. 11091, 11092, 11102, 11140, 11301-11308.

West Virginia

West Virginia Code, 1931, ch. 11, art. 1, secs. 1-6; art. 3, sec. 1.

Wisconsin

Wisconsin Statutes, 1933, 70.75, 73.01, 73.03, 73.05, 73.07.

Wyoming

Wyoming Revised Statutes, 1931, ch. 151, secs. 511, 512.

D. Reports of (Permanent) Administrative Tax Officials

Alabama

Report of the State Tax Commission, quadrennium 1930-34.

Arizona

Biennial Report of State Tax Commission, 1918-19, to date.

Arkansas

Biennial Report of Tax Commission, 1916-18 to 1931-32 (1923-24 and 1925-26 issued as *Report of the Tax Division of the Railroad Commission*).

California

Biennial Reports of the State Board of Equalization, 1917-18 to date.

Colorado

Annual Report of the Tax Commission, 1918 to date.

Connecticut

Biennial Report of Tax Commissioner, 1916-18 to date.

Information Relative to the Assessment and Collection of Taxes, 1918 to date (annual).

Florida

Biennial Report of the State Equalizer of Taxes, 1921-22, 1923-24. (No more published. Office abolished in 1931.)

Georgia

Annual Report of the Comptroller, 1918 to date.

Statistical Report of the State Revenue Commission, for the Years 1932-1933-1934.

*Idaho**Proceedings of State Board of Equalization, 1918 to date.**Illinois**Annual Report of Tax Commission, 1919 to date**Indiana**Annual Report of the State Board of Tax Commissioners, 1919-20 to date.**Proceedings Annual Conference of State Board of Tax Commissioners and County Assessors, 1918 to date.**Iowa**State Board of Assessment and Review, Taxable Valuation of Property, 1929 to date.**Kansas**Biennial Report of Tax Commission 1916-18 to date. (Its recommendations concerning legislation are issued separately as Report to the Legislature.)**Kentucky**Annual Report of the Tax Commission, 1918 to date.**Louisiana**Annual Report of the Tax Commission, 1921 to date.**Maine**Report of State Board of Assessors, 1916 to 1925-26.**Report of Bureau of Taxation, Property Division, 1931 to date.**Maryland**Biennial Report of State Tax Commission, 1918-19 to date.**Massachusetts**Report of the Tax Commissioner, 1918 to date.**Michigan**Report of Board of State Tax Commissioners and State Board of Assessors, 1915-16 to 1923-24; Report of State Tax Department and State Board of Assessors, 1925-26; Report of State Tax Commission and State Board of Assessors, 1927-28 to date.**Minnesota**Biennial Report, 1918-20 to date.**Missouri**Biennial Reports of Tax Commission, 1917-18 to date.**Mississippi**Report of State Tax Commission, 1916 to date.*

Montana

Biennial Report of the State Board of Equalization, 1920-22 to date.

Nebraska

Annual Report of the State Tax Commissioner and the State Board of Equalization and Assessment, 1921-22 to date.

Nevada

Biennial Report of the Tax Commission, 1917-18 to date.

New Hampshire

Annual Report of the State Tax Commission, 1918 to date.

New Jersey

Annual Report of State Board of Taxes and Assessments, 1915 to 1930-31.

Annual Report of State Tax Department, 1931-32 to date.

New Mexico

Biennial Report of the State Tax Commission, 1916-18 to date.

New York

Department of Taxation and Finance, Annual Report of the State Tax Commission, 1915 to date.

New York City. Report of Commissioners of Taxes and Assessments, 1901 to date.

North Carolina

Report of the Commissioner of Revenue, 1921 to date.

North Dakota

Biennial Report for Tax Commissioner, 1919-20 to date.

Ohio

Annual Report of the Tax Commission, 1918 to date

Oklahoma

Annual Report of Tax Commission, 1931-32 to date.

Oregon

Biennial Report of the State Tax Commission, 1917-18 to date.

Rhode Island

Report of Board of Tax Commissioners, 1919-20 to date.

South Carolina

Annual Report of Tax Commission, 1915 to date.

South Dakota

Report of Tax Commission (1913-14 to 1923-24); Report of Department of Finance, Division of Taxation, 1924-25 to date.

Tennessee

Finance and Taxation Department, *Report of the Commissioner of Finance and Taxation*, 1923-24 to date.

Texas

Annual Report of the State Tax Commissioner, 1918 to date.

Vermont

Biennial Report of the Commissioner of Taxes, 1916-18 to date.

Virginia

Report of the State Tax Commission, 1924-25.

Report of the Department of Taxation, 1926-29 to date.

Washington

Biennial Reports of the State Tax Commissioner, 1916 to 1922.

First Biennial Report of the Department of Taxation and Examination, Division of Taxation, 1924.

Biennial Report of Tax Commission, 1924-26 to date.

West Virginia

Biennial Report of Tax Commissioner, 1916-18 to date.

Wisconsin

Biennial Report of the Tax Commission, 1899-1900 to date.

Wyoming

Biennial Report of State Board of Equalization, 1919-20 to date.

II. BACKGROUND MATERIALS

A. Historical

Adams, Romanzo C., *Taxation in Nevada. A History*, Nevada Applied History Series, Vol. 1, 1918

Adams, T. S., *Taxation in Maryland*, Johns Hopkins Studies in Historical and Political Science, Series XVIII, Nos. 1, 2, 3, 4, *Studies in State Taxation* (Jacob Hollander, Editor), 1900, I.

Barnett, G. E., *Taxation in North Carolina*, Johns Hopkins Studies in Historical and Political Science, Series XVIII, Nos. 1, 2, 3, 4, *Studies in State Taxation* (Jacob Hollander, Editor), 1900, II.

Beard, Charles A., and Beard, Mary R., *The Rise of American Civilization*, 2 vols., 1927, Macmillan, New York.

Benton, E. J., *Taxation in Kansas*, Johns Hopkins Studies in Historical and Political Science, Series XVIII, Nos. 1, 2, 3, 4, *Studies in State Taxation* (Jacob Hollander, Editor), 1900 III.

Blakey, Gladys C., *A History of Taxation in Minnesota*, University of Minnesota Studies in Economics and Business, No. 9, July 1934.

- Bogart, E. L., *Financial History of Ohio*, University of Illinois Studies, Vol. 1, Nos. 1 and 2, 1912.
- Boyle, J. E., *Financial History of Kansas*, University of Wisconsin Bulletin No. 247, 1908.
- Brindley, John E., *History of Taxation in Iowa*, 2 vols., State Historical Society of Iowa, 1911.
- Brough, C. H., *Taxation in Mississippi*, Johns Hopkins Studies in Historical and Political Science, Series XVIII, Nos. 1, 2, 3, 4, *Studies in State Taxation* (Jacob Hollander, Editor), 1900, IV.
- Bullock, C. J., *Historical Sketch of the Finances and Financial Policy of Massachusetts from 1780 to 1905*, Publications of the American Economic Association, 3rd Series, Vol. VIII, 1907.
- Crowell, J. F., *Taxation in the American Colonies: The Colony of New Jersey*, Trinity College (Durham) Publications, Political and Social Science Series No. 6.
- Douglas, C. H. P., *Financial History of Massachusetts*, Columbia University Studies in History, Economics and Public Law, Vol. I, 1892.
- Evans, N. W., *Taxation in Ohio: A History*, Robert Clarke, Cincinnati, 1906.
- Fairlie, J. A., *Centralization of Administration in New York*, Columbia University Studies in History, Economics and Public Law, Vol. IX, No. 3, 1898.
- Fankhauser, W. C., *A Financial History of California*, University of California Publications in Economics, Vol. III, No. 2, Nov. 13, 1913.
- Farrand, Max, *The Legislation of Congress for the Government of the Organized Territories of the United States, 1789-1895*, W. A. Baker, Newark, N. J., June 1896.
- Haig, R. M., *A History of the General Property Tax in Illinois*, University of Illinois Studies in the Social Sciences, Vol. III, Nos. 1 and 2, 1914.
- Hanna, H. S., *A Financial History of Maryland (1789-1848)*, Johns Hopkins Studies in Historical and Political Science, Series XXV, Nos. 8, 9, 10, 1907.
- Howard, G. E., *An Introduction to the Local Constitutional History of the United States*, Johns Hopkins University Studies in Historical and Political Science, Vol. XV, 1889.
- Jones, F. R., *History of Taxation in Connecticut 1636-1776*, Johns Hopkins Studies in Historical and Political Science, Fourteenth Series, VIII, 1896.
- Mathews, J. M., "Tax Administration in New Jersey," *Journal of Political Economy*, Vol. 20, 1912.
- Miller, E. T., *A Financial History of Texas*, Texas University Bulletin No. 37, 1916.
- Noble, F. H. S., *Taxation in Iowa*, Nixon-Jones, St. Louis, 1897.
- Osgood, Herbert L., *The American Colonies in the Seventeenth Century*, Macmillan, New York, 1904-1907, 3 vols.
- , *The American Colonies in the Eighteenth Century*, Columbia University Press, New York, 1924, 4 vols.

- Parker, Coralie, *The History of Taxation in North Carolina during The Colonial Period 1663-1776*, Columbia University Press, New York, 1928.
- Paxson, F. L., *History of the American Frontier 1763-1893*, Houghton Mifflin, Boston, 1924.
- Phelan, R. V., *The Financial History of Wisconsin*, University of Wisconsin Bulletin 193, Economics and Political Series, Vol. 2, No. 2, 1908.
- Rawles, W. A., *Centralizing Tendencies in the Administration of Indiana*, Columbia University Studies in History, Economics, and Public Law, Vol. XVII, No. 1, 1903.
- Rhodes, M. C., *History of Taxation in Mississippi*, George Peabody College for Teachers, Contributions to Education No. 79, Aug. 1930.
- Ripley, W. Z., *The Financial History of Virginia*, Columbia Studies in History, Economics and Public Law, Vol. IV, No. 1, 1893.
- Robinson, M. H., *A History of Taxation in New Hampshire*, Publications of the American Economic Association, Third Series, Vol. III, No. 3, Aug. 1902.
- Schmekebier, L. F., *Taxation in Georgia*, Johns Hopkins Studies in Historical and Political Science, Series XVIII, No. 1, 2, 3, 4, *Studies in State Taxation* (Jacob Hollander, Editor), 1900, V.
- Schwab, J. C., *History of the New York General Property Tax*, Publications of the American Economic Association, Vol. V, No. 5, 1890.
- Sowers, Don C., *The Financial History of New York State from 1789 to 1912*, Columbia Studies in History, Economics and Public Law, Vol. LVII, No. 2, 1914.
- Taff, N. O., *History of State Revenue and Taxation in Kentucky*, George Peabody College for Teachers Contribution to Education No. 85, 1931.
- Turner, Frederick J., *The Frontier in American History*, Henry Holt, New York, 1920.
- , *The Significance of Sections in American History*, Henry Holt, New York, 1932.
- Walradt, H. F., *The Financial History of Connecticut from 1789 to 1861*, Transactions of the Connecticut Academy of Arts and Sciences, Vol. 17, 1912.
- Whitten, R. H., *Public Administration in Massachusetts*, Columbia Studies in History, Economics and Public Law, Vol. VIII, No. 4, 1898.
- Wolcott, Oliver, Jr., *Report on Direct Taxes*, Communicated to the House of Representatives, Dec. 14, 1796, American Finance Papers, Vol. 1, 420 ff.
- Wood, F. A., *The Finances of Vermont*, Columbia University Studies in History, Economics, and Public Law, Vol. LII, No. 3, 1913.
- , *History of Taxation in Vermont*, Columbia University Studies in History, Economics, and Public Law, Vol. IV, No. 3, 1894.

B. General Fiscal and Various Aspects of Property Taxation

- Adams, T. S., "The Essential Conditions of Tax Reform," *Taxation in Washington*, Papers and Discussions of the State Tax Conference at the University of Washington, May 27-29, 1914, Bulletin of the University of Washington, ex ser. No. 12, 196 ff.
- , "Separation of State and Local Revenues," *Annals of the American Academy of Political and Social Science*, Vol. LVIII, March 1915, 131 ff.
- Atkinson, R. C., *The Effects of Tax Limitation upon Local Finance in Ohio 1911-1922*, Cleveland, 1923.
- , "Stringent Tax Limitations and its Effects in Ohio," Public Administration Service No 36, *Property Tax Limitation Laws* (Glen Leet and Robert M. Paige, Editors), 1934.
- , "Tax and Debt Limit Laws," *Proceedings of the National Tax Association*, 1924, 151 ff.
- Aull, G. H., *The Taxation of Farmers in South Carolina*, South Carolina Agricultural Experiment Station Bulletin 285, Oct 1932.
- Bidwell, F. D., *Taxation in New York State*, J. B. Lyon, Albany, 1918.
- Brannen, Claude O., *Taxation in Tennessee*, Baldwin Law Book Co., 1920.
- Brindley, John E and Zorbaugh Grace S M., *The Tax System in Iowa*, Iowa State College Extension Bulletin 150, 1929.
- Boyle, J. E., "Methods of Assessment as Applied to Different Classes of Subjects," *Proceedings of the National Tax Association*, 1907, 128 ff.
- Bryan, Malcolm H., *The Fiscal Position of Georgia*, University of Georgia Bureau of Business Research Bulletin, Vol. 30, No. 11c, 1930.
- Bullock, C. J., "Practicable Reforms in State and Local Taxation," *Taxation in Washington*, Papers and Discussion of the State Tax Conference at the University of Washington, May 27-29, 1914, Bulletin of the University of Washington, ex. ser No 12, 224 ff.
- , *Selected Readings in Public Finance*, Ginn, Boston, 3d ed., 1924.
- , "A Classified Property Tax," *Proceedings of the National Tax Association*, 1909, 95 ff.
- Call, Irving J., *Farm Property Taxation in New York*, Cornell Agricultural Experiment Station Bulletin No. 485, 1929
- Chapman, J. W. Jr., *State Tax Commissions in the United States*, Johns Hopkins University Studies in Historical and Political Science, Fifteenth Series, X-XI, 1897.
- Compton, Ralph T., *Fiscal Problems of Rural Decline*, Special Report No 2 of the New York State Tax Commission, 1929.
- Corbin, Wm H., "Apportionment of State Taxes On Basis of Local Revenue," *Proceedings of the National Tax Association*, 1911, 263 ff.

- Cornick, Philip H., "Local Finance" (Fifth of a series of articles edited by Paul Studenski entitled "Taxation in the New Social State"), *Nation*, Nov. 21, 1934, 586 ff.
- Crobaugh, Clyde J., "Centralizing Fiscal Tendencies in State and Local Relations," *Proceedings of the National Tax Association*, 1924, 172 ff.
- Current Problems in Public Finance. Lectures Delivered at the National Conference on the Relations of Law and Business, New York University, Commerce Clearing House, New York, 1933.*
- Discussion of Administrative Problems, *Proceedings of the National Tax Association*, 1910, 355 ff
- Ely, R. T., *Taxation in American States and Cities*, T. Y. Crowell, New York, 1888.
- Englund, Eric, *Tax Revision in Kansas*, Kansas Agricultural Experiment Station Bulletin 234, Dec. 1924.
- Evans, Melvin, *A Study in the State Government of Louisiana*, Louisiana State University Studies No. 4, 1931.
- Fairchild Fred R., Discussion of Preliminary Report of Committee of National Tax Association on Delinquent Taxes, *Proceedings of the National Tax Association*, 1933, 277 ff.
- , *Report of a Special Study of the Connecticut Tax System* (conducted for the Connecticut Chamber of Commerce), 1917.
- Fiske, Leland E., "The Oklahoma Tax System," *The Tax Magazine*, Nov. 1931, 400 ff.
- Foote, Allen R., "A State Tax on Local Government Incomes Proposed as a Practical Substitute for a State General Property Tax," *Proceedings of the National Tax Association*, 1911, 253 ff.
- Graves, Mark, "Some State Tax Problems," *Proceedings of the Fourteenth Conference of the American Country Life Association*, 1931, 129 ff.
- , "An Ideal Tax System," *Bulletin of the National Tax Association*, March 1927, 168 ff.
- Gulick, Luther, "The Tax System of the State of New York as Viewed by the Student and Research Investigator," *Proceedings of the National Tax Association*, 1929, 68 ff.
- Haensel, Paul, "Tax Problems in the Light of the Recovery Program, III State and Local Tax Problems," *The Tax Magazine*, Dec. 1934, 651 ff.
- Haig, Robert M., "The Coordination of the Federal and State Tax Systems," *Proceedings of the National Tax Association*, 1932, 220 ff.
- , "Discussion of Property Tax Offsets to Income Taxes," *Proceedings of the National Tax Association*, 1931, 134 ff.
- , "Federal Tax Collection with Allocation of Share of Proceeds to the States," *The Tax Magazine*, March 1933, 95 ff.
- , "The Relation of the Tax Systems of the State and Nation," in *Lectures on Taxation*, (Roswell Magill, Editor) Commerce Clearing House, New York, 1932, 215 ff.

- Haig, Robert M., "The Single Tax Limited in War Time," *Proceedings of the National Tax Association*, 1917, 375 ff.
- , "Some Economic Effects of the Special Taxation of Land," *Proceedings of the National Tax Association*, 1915, 94 ff.
- , *The Work of the Colorado Tax Commission* (a report prepared for the Survey Committee of State Affairs of Colorado), 1916.
- Haig, Robert M. and Shoup, Carl, *The Sales Tax in the American States*, Columbia University Press, New York, 1934.
- Heer, Clarence, "Taxation and Public Finance," constituting ch. xxvi of President's Research Committee on Social Trends, *Recent Social Trends in the United States* (W. C. Mitchell, Chairman), 1933.
- Holmes, Alexander, "The Massachusetts Board of Tax Appeals," *Bulletin of the National Tax Association*, April 1932, 195 ff.
- Howard, Mayne S., "Standardization of State Tax Reports," *Proceedings of the National Tax Association*, 1922, 507 ff.
- Howe, S. T., "The Central Control of the Valuation of Taxable Subjects," *Annals of the American Academy of Political and Social Science*, Vol. LVIII, 1915, 112 ff.
- Hutchinson, R. G., *State Administered Locally Shared Taxes*, Columbia Studies in History, Economics, and Public Law, No. 335, 1931.
- Inman, C. E., "Advantages of Separation of State and Local Revenues," *Proceedings of the National Tax Association*, 1926, 292 ff.
- Institute for Government Research of the Brookings Institution, Studies in Administration No. 26, *State Centralization in North Carolina* (P. V. Betters, Editor), 1932.
- Jackson, Donald, "Rural Tax Delinquency Data," *Proceedings of the National Tax Association*, 1934, 324 ff.
- Jensen, Jens P., "Delinquent Taxes," *Proceedings of the National Tax Association*, 1930, 228 ff.
- Kendrick, M. Slade, *The Collection of Taxes by the State of New York and the Division of these Revenues with Local Units of Government*, Cornell Agricultural Experiment Station Bulletin 511, 1930.
- , *The New York System of Taxation*, Cornell Extension Bulletin No. 216, Aug. 1931.
- Klemmedson, G. S., *State and Local Tax Revision in Colorado*, Agricultural College Bulletin 398, Dec. 1932.
- Leland, Simeon E., *Taxation in Kentucky*, University of Kentucky Studies in Economics and Sociology, Vol. 1, No. 1, 1920.
- , *The Classified Property Tax*, Houghton Mifflin, Boston, 1928.
- , "The Integration of Governments and Fiscal Systems," *The Tax Magazine*, Apr. 1931, pp. 128-132, 153-154.
- , "Alternatives: A Constructive Outlook," Public Administration Service, No. 36, *Tax Limitation Laws* (Glen Leet and Robert M. Paige, Editors), 1934.
- Long, Henry F., "Massachusetts Board of Tax Appeals," *The Tax Magazine*, Apr. 1931, pp. 133 ff.

- Lovejoy, P. J., Theory and Practice of Land Classification," *Journal of Land and Public Utility Economics*, April 1925, 160 ff.
- Lutz, H. L., *Public Finance*, Appleton, New York, 1928.
- , "The Control of Public Expenditures," *Proceedings of the National Tax Association*, 1931, 153 ff.
- , "Tax Relief Through the Control of Public Expenditures," *Bulletin of the National Tax Association*, April 1931.
- Merriam, C. E., "Reform in Municipal Taxation," *Proceedings of the National Tax Association*, 1907, 415 ff.
- Merrill, John J., "The Tax System of New York State, as Viewed by the Administrator," *Proceedings of the National Tax Association*, 1929, 116 ff.
- Minnesota Institute of Governmental Research, *Minnesota's Tax Picture. A Graphic Study of Minnesota's Tax System with Special Reference to the Property Tax*, State Governmental Research Bulletin No. 4, April 1935.
- Moore, H. R. and Falconer, J. I. Falconer, *Public Revenues in Ohio with Especial Reference to Rural Taxation*, Ohio Agricultural Experiment Station Bulletin 425, Aug. 1928.
- Morgan, E. B., "The Essentials of Effective Tax Administration," *Proceedings of the National Tax Association*, 1930, 15 ff.
- National Civic Federation, *Proceedings of the National Conference on Taxation*, Buffalo, May 1901.
- National Industrial Conference Board, *Cost of Government in the United States, 1924-25, 1926-27, 1928-29, 1929-30*, New York, 1926-32.
- , *The Fiscal Problem in Delaware*, New York, 1927.
- , *The Fiscal Problem in Illinois*, New York, 1927.
- , *The Fiscal Problem in New York*, New York, 1928.
- , *Current Tax Problems in New York State*, New York, 1931.
- , *The Tax Problem in West Virginia*, New York, 1925.
- , *The Tax Problem in Wisconsin*, New York, 1924.
- Newcomer, M., "The General Property Tax and the Farmer," *Journal of Political Economy*, Vol. XXXVIII, 1930, pp. 62-72.
- , "Tendencies in State and Local Finance and their Relation to State and Local Taxation," *Political Science Quarterly*, March 1928.
- , *Separation of State and Local Revenues in the United States*, Columbia University Studies in History, Economics, and Public Law, Vol. LXXVI, 1917.
- Plehn, Carl C., *Introduction to Public Finance*, Macmillan, New York, 5th ed., 1926.
- , *The General Property Tax in California*, American Economic Association, Economic Studies, Vol. 2, No. 3, 1897, 111 ff.
- Preliminary Report of the Committee of the National Tax Association on Tax Delinquency (Fred R. Fairchild, Chairman), *Proceedings of the National Tax Association*, 1932, 292 ff.
- Preliminary Report of the Committee, Appointed by the National Tax Association to Prepare a Plan for a Model System of State and Local Taxation (C. J. Bullock, Chairman), *Proceedings of the National Tax Association*, 1919, 426 ff.

- President's Conference on Home Building and Home Ownership, *Reports of the Committees on Home Finance and Taxation*, 1932.
- Progress Report of Committee of National Tax Association on Tax Delinquency (Fred R. Farchild, Chairman), *Proceedings of the National Tax Association*, 1934, 320.
- Renne, R. R. and Allin, B. W., *Montana Farm Taxes*, Montana Agricultural Experiment Station Bulletin No. 286, March 1934.
- Report of Committee on Standardization of Annual Reports of State Tax Commissions, (Mark Graves, Chairman), *Proceedings of the National Tax Association* 1923, 422 ff.
- Riley, Ray L., "Elimination of the State Levy as a Part of a Tax Program," *Proceedings of the National Tax Association*, 1926, 288 ff.
- Roberts, W. A., *Arizona Tax Problems*, University of Arizona Social Science Bulletin No. 8, Feb. 15, 1935.
- Second Report of Committee of the National Tax Association (Mark Graves, Chairman), "Standardization of Annual Reports of State Tax Departments," *Proceedings of the National Tax Association*, 1924, 376 ff.
- Seligman, E. R. A., *Essays in Taxation*, New York, 10th ed. (Revised), 1928, especially ch. 1, "The Development of Taxation," ch. 11, "The General Property Tax," ch. xix, "American Reports on Taxation," and ch. xx, "The Next Step in Tax Reform."
- , "The Importance of Precision in Assessments," *Proceedings of the National Tax Association*, 1908, 211 ff.
- , "The Fiscal Outlook and the Coordination of Public Revenues," *Current Problems in Public Finance*, Commerce Clearing House, 1933, 261 ff.
- , *The Income Tax*, Macmillan, 2d ed., 1914.
- , "Our Fiscal Difficulties and the Way Out," *Proceedings of the New York State Conference on Taxation*, 1919, 13 ff.
- , *Progressive Taxation in Theory and Practice*, American Economic Association Quarterly, Third Series, Vol. IX, No. 4, 2nd ed. 1908.
- , "The Separation of State and Local Revenues," *Proceedings of the National Tax Association*, 1907, 485 ff.
- , *The Shifting and Incidence of Taxation*, Columbia University Press, 4th ed., 1921.
- , "A Study of the Fiscal Situation in New Jersey," Reprint of a series of articles which appeared in the *Trenton Evening Times* commencing Sept. 11, 1930.
- Shere, Louis, "The Revenue Problem of Tax-Limit Cities," *Report of the New York State Commission for the Revision of the Tax Laws*, 1932, Memorandum No. 8.
- Shultz, W. J., *American Public Finance*, Prentice-Hall, New York, 1931.

- Simpson, Herbert D., "The Effect of a Property Tax Offset Under an Income Tax," *Proceedings of the National Tax Association*, 1931, 126 ff.
- Snavely, Tipton R., "Conflict Between State Control and Local Self-Government," *Proceedings of the National Tax Association*, 1925, 129 ff.
- Sorrell, V. G., *State and Local Taxation, with Special Reference to New Mexico Problems*, New Mexico University Economic Series, Vol. 2, No 1, 1932.
- Sowers, Don C., *The Tax Problem in Colorado*, University of Colorado Bulletin, Vol. XXVIII, No 121, Dec. 1928.
- Street, A. B., *Digest of Taxation in the United States*, Albany, 1863.
- Studenski, Paul, *Chapters on Public Finance*, Ray Long and Richard R. Smith, New York, 1933.
- , "Tax Administration in New Jersey," *The Tax Magazine*, May 1932, 169 ff.
- Tax Research Foundation (M. S. Howard, Editor), *Tax Systems of the World*, 5th ed. 1934.
- Tobin, Charles J., "The New York State Tax Situation as Viewed by the Tax-payer," *Proceedings of the National Tax Association*, 1929, 82 ff.
- Upson, Lent D., "Tax Delinquency: Administration and Legislation," *Proceedings of the National Tax Association*, 1934, 356 ff.
- Vaughan, George, "The Increasing Importance of Special Taxes," *Proceedings of the National Tax Association*, 1924, 395 ff.
- Virginia State Chamber of Commerce, *Reconstruction of Virginia's Tax System*, Finance Document No. 5, 1929.
- Wager, Paul W., "Revision of Tax Delinquent Lands," *Proceedings of the National Tax Association*, 1934, 367 ff.
- Woodworth, Leo D., "Collection of Property Taxes with Special Reference to Real Estate," *Proceedings of the National Tax Association*, 1930, 330 ff.
- Zangerle, John A., "What is an Excessive Tax Burden?," *Bulletin of the National Tax Association*, June 1929, 262 ff.
- Zoercher, Philip, "Central Supervision of Local Expenditures," *Proceedings of the National Tax Association*, 1924, 163 ff.

C. Government and Administration

- Bates, F. G. and Field O. P., *State Government*, Harper, New York, 1928.
- Breckinridge, Sophonisba P., *Public Welfare Administration in the United States. Select Documents*, University of Chicago Press, 1927.
- Bromage, A. W., *American County Government*, Holston House, Searſ, New York, 1933.

- Chapin, Charles V., "State Boards of Health," *Proceedings American Political Science Association*, 1904.
- Crawford, F. G., *State Government*, Henry Holt, New York, 1931.
- Cubberly, E. P., *Public Education in the United States*, Houghton Mifflin, Boston, 1919.
- , *Public School Administration*, Houghton Mifflin, Boston, 1916.
- Dodd, Walter F., *State Government*, Century, New York, 1931.
- Fairlie J. A. and Kneier, *County Government and Administration*, Century, New York, 1930.
- Gilbertson, H. S., *The County: The Dark Continent of American Politics*, The National Short Ballot Organization, New York, 1917.
- Goodnow, F. J., *Politics and Administration*, Macmillan, New York, 1900.
- Goodrich, Robert M., "Like the Dead Indian: The County," *National Municipal Review*, Sept. 1922, 259 ff.
- Gulick, Luther, "Graft and its Control," *Current Problems in Public Finance*, Commerce Clearing House, New York, 1933, 60 ff.
- Holcombe, A. N., *State Government in the United States*, Macmillan, New York, 3rd. ed., 1931.
- Kilpatrick, Wylie, *Problems in Contemporary County Government*, University of Virginia, Institute for Research in the Social Sciences, Institute Monograph No. 8, 1930.
- Kimball, Everett, *State and Municipal Government in the United States*, Ginn, 1922.
- Mathews, J. M., *Principles of American State Administration*, Appleton, New York, 1917.
- , *A Report on Educational Administration*, prepared for the Efficiency and Economy Committee of Illinois, 1914.
- , *A Report on Public Health Administration*, prepared for the Efficiency and Economy Committee of Illinois, 1914.
- McDonald, Austin F., *American City Government and Administration*, Crowell, New York, 1929.
- Munro, W. B., *Municipal Administration*, Macmillan, New York, 1934.
- Porter, Kirk H., *County and Township Government in the United States*, Macmillan, New York, 1922.
- President's Research Committee on Social Trends, *Recent Social Trends in the United States*, (W. C. Mitchell, Chairman), 1933. 2 vols.
- Reed, Thomas H., *Municipal Government in the United States*, Appleton-Century, New York, rev ed., 1934.
- Rocca, Helen M., *County Government*, National League of Women Voters, Washington, D. C., 1928.
- Upson, Lent D., *Practice of Municipal Administration*, Century, New York, 1926.
- Wallace, Schuyler C., *State Supervision over Cities in the United States*, Columbia Studies in History, Economics and Public Law, No. 304, 1928.

- White, Leonard D., *Introduction to the Study of Public Administration*, Macmillan, New York, 1926.
- , *Trends in Public Administration* (Recent Social Trends Monograph), McGraw-Hill, New York, 1933.

D. Land Economics

- Bodfish, H. Morton, "Population and Peak Land Values in Business Districts," *Journal of Land and Public Utility Economics*, August 1930, 270 ff.
- Chambers, Clyde R., *Relation of Land Income to Land Values*, United States Department of Agriculture Bulletin 1224, 1924.
- Cornick, Philip H., "Land Prices in a Commodity Price System," *Journal of Land and Public Utility Economics*, August 1934, 217 ff.
- Dorau, Herbert B. and Hinman, Albert G., *Urban Land Economics*, Macmillan, New York, 1928.
- Ely, Richard T., and Morehouse, Edward W., *Elements of Land Economics*, Macmillan, New York, 1924.
- Ely, Richard T., assisted by Shine, Mary L. and Wehrwein, George S., *Characteristics and Classification of Land*, Outlines of Land Economics, Vol. I, Edwards Brothers, Ann Harbor, 1922.
- , *Costs and Income in Land Utilization*, Outlines of Land Economics, Vol. II, Edwards Brothers, Ann Harbor, 1922.
- , *Land Policies*, Outlines of Land Economics, Vol. III, Edwards Brothers, Ann Harbor, 1922.
- Ezekial, Mordecai, *Factors Affecting Farmers' Earnings in South-eastern Pennsylvania*, United States Department of Agriculture Bulletin 1400, April 1926.
- Haig, R. M., "Major Economic Factors in Metropolitan Growth and Arrangement; a Study of Trends and Tendencies in the Economic Activities within the Region of New York and its Environs." *Regional Plan of New York and its Environs Regional Survey*, Vol. I, 1927.
- , "Toward an Understanding of the Metropolis," *Quarterly Journal of Economics*, Feb. 1926, 179 ff and May 1926, 402 ff.
- Hoyt, Homer, *One Hundred Years of Land Values in Chicago. The Relationship of the Growth of Chicago to the Rise in its Land Values, 1830-1933*, University of Chicago Press, 1933.
- Hurd, R. M., *Principles of City Land Values*, The Record and Guide, New York, 4th ed., 1924.
- Institute for Research in Land Economics, *Urban Land Economics*. Lectures by Prof. Michael Rostovtzeff, Dr. Mary L. Shine, Prof. R. H. Whitbeck, Dr. G. B. L. Arner, with an introduction by Dr. R. T. Ely, Edwards Brothers, Ann Harbor, 1922.
- McMichael, S. L. and Bingham, R. F., *City Growth Essentials*, McMichael, Cleveland, 1928.
- , *City Growth and Values*, McMichael, Cleveland, 1923.

- Mertzke, Arthur J, "Land Values and Population," *Journal of Land and Public Utility Economics*, July 1926, 343 ff
- New York State Planning Board, *Summary Report of Progress to the Governor*; "State Planning for New York," 1935.
- , *A Progress Report to the National Resources Board on the Making of a State Plan for New York*, Mar. 1–Sept. 1, 1934.
- Simpson, H. D., "The Influence of Public Improvements on Land Values," *Annals of the American Academy of Political and Social Science*, Vol. CXLVIII, Part I, March 1930, 120 ff.
- Spengler, Edwin H., *Land Values in New York in Relation to Transit Facilities*, Columbia University Press, New York, 1930.
- Tennant, J. L., *The Relationships between Roads and Agriculture in New York*, Cornell University Agricultural Experiment Station Bulletin 479, May 1929.

E. Reports of (Temporary) Special Investigating and Advisory Commissions

Arkansas

Commission on Business Laws and Taxation, 1929.

California

Report of the Commission on Revenue and Taxation, 1906.

Report of the Commission on Revenue and Taxation, 1910.

Report of the State Tax Commission, 1917.

Report of Joint Legislative Committee on Taxation, 1931.

Connecticut

Report of the Special Commission on the Subject of Taxation, 1887.

Report of the Special State Commission on Taxation, 1917.

Delaware

Report of the Governor's Advisory Commission on the Study of County Government and Taxation, 1932.

Georgia

Report of Special Tax Commission, 1919.

Report of Special Tax Commission, 1929.

Illinois

Report of the Joint Legislative Revenue Committee, March 1929.

Report of the Illinois Commission on Taxation and Expenditures, 1933 (Includes Summary of a Report on the Reorganization of Local Government in Illinois, at pp. 23–182, by Griffenhagen & Associates, Ltd).

Indiana

Report of the Tax Survey Committee, Dec. 1931,

Iowa

Report of the Joint Legislative Committee on Taxation, 1923.

Report of the Joint Legislative Committee on Taxation and State Board of Assessment and Review, 1930.

Kansas

Report of the Kansas Tax Code Commission, Dec. 1929

Louisiana

Report of the Assessment and Taxation Commission to the Constitutional Convention, 1921.

Maryland

Report of the Maryland Tax Revision Commission, 1928.

Report of the Tax Survey Commission, 1932.

Massachusetts

Report of the Special Commission to Investigate the Entire Subject of State, County and Local Taxation, 1929.

Report of the Special Commission Directed to Continue the Investigation of the Entire Subject of State, County and Local Taxation and Revenues from Fees and Other Sources, 1929.

Report of the Special Commission Directed to Study the General Subject of State, County and Local Taxation and the Taxation of Personal Income and of Corporations, 1930.

Michigan

Report of the Michigan Committee of Inquiry into Taxation, 1923.

Report of the State Commission of Inquiry into Taxation, 1930.

Minnesota

Report of Tax Revision Committee, 1933.

Missouri

A Report to the State Survey Commission. The Taxation System of Missouri (by H. J. Reber and E. O. Griffenhagen), in *Missouri General Assembly, Appendix to the House and Senate Journals, 1931.*

New Hampshire

Report of New Hampshire Tax Commission, 1908.

Report of the Recess Tax Commission, 1927-28.

New Jersey

Report on a Study of the Financial and Tax Problems of Municipal Governments in New Jersey, 1933 (by the Committees on Taxation of the Senate and House of Assembly of the 157th Legislature).

New Mexico

Report of the Special Revenue Commission, 1920.

New York

- Report of the Joint Legislative Committee on Taxation*, 1916.
- Report of the Special Joint Legislative Committee on Taxation and Retrenchment*, 1920, Leg. Doc't. 80 (1920)
- Report of the Special Joint Committee on Taxation and Retrenchment*, 1921, Taxation Section, Leg. Doc't. (1921) No. 57.
- Report of the Special Joint Committee on Taxation and Retrenchment*, 1922, Leg. Doc't. (1922) No. 72.
- Report of the Special Joint Committee on Taxation and Retrenchment*, 1923, Leg. Doc't (1923) No. 55.
- Report of the Special Joint Committee on Taxation and Retrenchment*, 1925, Leg. Doc't. (1925) No. 97.
- Report of the New York State Commission for the Revision of the Tax Laws*, 1932.
- Third Report of the New York State Commission for the Revision of the Tax Laws*, 1933.

North Carolina

- Report of the Tax Commission*, 1928.
- Report of the Tax Commission*, 1930.
- Report of the Tax Commission*, 1932.

Ohio

- Report of the Joint Legislative Committee on Economy and Taxation*, 1926.

Oregon

- Report of the Special Tax Investigating Committee*, 1926.
- Report of the Property Tax Relief Commission*, 1929.

Pennsylvania

- Report of the Tax Law Revision Commission*, 1921.
- Report of the Pennsylvania Tax Commission*, 1925.
- Final Report of the Pennsylvania Tax Commission*, 1927.

Texas

- Report of the Tax Survey Committee*, 1929, Supplement to the Journal of the House of Representatives, 41st Legislature.
- Report of the Tax Survey Committee*, 1933, Supplement to the Journal of the House of Representatives, 43d Legislature.

Utah

- Report of the Tax Revision Commission*, 1929.

Vermont

- Report of the Vermont State Tax Commission*, 1930.

West Virginia

- Report of the West Virginia State Tax Commission*, 1927.

Wisconsin

- Report of the Interim Committee on Administration and Taxation*, 1926.

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